THE EFFECTIVENESS OF MANAGEMENT ACCOUNTING TECHNIQUES WITHIN THE LIBYAN PEOPLE'S COMMITTEES OF MUNICIPALITIES

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THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTORATE OF PHILOSOPHY AT THE BUSINESS SCHOOL, LIVERPOOL JOHN MOORES UNIVERSITY.

April 2011

DEDICATION

To my mother, father, wife, children, brothers and sisters

Abstract

The effectiveness of management accounting techniques within Libyan Peoples Committees of Municipalities [LPCMs] was investigated focusing on the current application of management accounting techniques and the factors that affect current practice of these techniques. The study investigated the role of budget preparation, budgetary control and performance evaluation within Libya and aimed to gather a current contextual overview of practices since the final lifting on United Nation [UN] sanctions and the move to the open market economic structure. As part the study the effectiveness of current practice was evaluated to help identify opportunities for further development.

The study used a combined methodology approach which enabled triangulation between the various agencies involved in management accounting within LPCMs. Statistical analysis of the questionnaire survey was undertaken along with content analysis of the semi-structured interview responses to build an overview of current practice and the rationale behind the application of management accounting techniques.

LPCMs are still utilising traditional methods of management accounting due to the legislative requirements and this is main motivation for the application of management accounting techniques. An overview of the role of Central Government departments and LPCMs' intradepartmental activities in budget preparation and budgetary control has been described along with the formalised parliamentary approval process. Due to the current compliance focus it has been found that effectiveness and efficiency are not considerations in performance evaluation of LPCMs. The lack of recording of non-financial information is currently hindering organisations in the development of performance evaluation indicators and minimum standards. The study found that following factors have affected the application of accounting generally and the application of management accounting techniques in LPCMs particularly: top management support, management accounting training programmes, motivations systems, adequate financial resources for accounting development, using computer systems for management accounting purposes, accounting research in Libya, Professional accounting bodies in Libya, accounting education in Libya, co-operation between universities and LPCMs, economic changes, policy of government. A number of key recommendations have been developed but all hinge on the primary recommendation that Libya parliamentarians update Financial Law (1967) to meet the new global economic demands that Libya faces.

Acknowledgements

I would like to express my gratitude and thanks to the many people who have helped and contributed to the achievement of this study.

I am very grateful and deeply indebted to my supervision team, Mr Roger Pegum, Dr Yusra Mouzughi and Dr Karim Menacere for their invaluable guidance, support and encouragement and helpful comments at various stages of the study.

I would like also to thank all the participants in the questionnaire survey of LPCMs and interviews of the Libyan governmental bodies for their participation in this study. I am also grateful to staff of Business School at Liverpool John Moores University for their help, advice and encouragement during the study.

I would like to say thanks my family especially, my mother, father, wife Samia and children Alla and Elaf for their care, patience and endurance during the preparation of this study. I am also grateful to all the other people who I have not mentioned by name for their support, help and advice during my PhD.

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List of Acronyms

AAA	American Accounting Association
ABC	Activity-Based Costing
ABM	Activity-Based Management
AMUC	Arab Maghreb Union Countries
BPC	Basic People's Congress Congress
BVR	Best Value Regime
CICA	Canadian Institute of Chartered Accountants
CIMA	Chartered Institute of Management Accountants
CPA	Comprehensive Performance Assessment
EMP	Executive Management Plan
EU	European Union
FMI	Financial Management Initiative
FMIP	Financial Management Initiative Programme
GDP	Gross Domestic Product
General PC of Inspection and Control	General People's Committee of Inspection and Control
General PC of Planning	General People's Committee of Planning
General PC of Treasury	General People's Committee of Treasury
General PC	General People's Committee
GPC	General People's Congress
GPRA	Government Performance and Results Act
GSPLAJ	Great Socialist People's Libyan Arab Jamahiriya
HR	Human Resource
IT	Information Technology
IFAC	International Federation of Accountants
LAAA	Libyan Accountants and Auditors Association
LD	Libyan Dinar
LPCMs	Libyan People's Committees of Municipalities
LVO	Local VAT Offices
MPC	Municipal People's Congresses
NCGA	National Council on Government Accounting
NPM	New Public Management
NPR	National Performance Review
NSI	Next Step Initiative
OPEC	Organisation of Petroleum Exporting Countries
PCMs	People's Committees of Municipalities
PCM	People's Committees of Municipality
PPBS	The Planning Programming Budgeting System
PPP	Public Private Partnership
RCC	Revolutionary Command Council
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
USA	United States of America
VFM	Value For Money
ZBB	Zero-base Budgeting

Chapter One

Chapter One
Introduction to the research

1-1 Introduction

This study aims to examine the current practices of management accounting techniques in LPCMs. Through the use of four sections this introductory chapter aims to highlight the background to the study. Section 2 of this chapter explains the research problem and the justification rationale for undertaking the research study. While Section 3 reviews and discusses the aims and objectives which have underpinned the research process. The research question interpretation is found in Section 4. Section 5 provides an outline of the research methodology. Finally, Section 6 outlines the structure of the research undertaken.

1-2 Background to the study

Management accounting information is no less important than financial accounting information, whereas the latter is more popular in practice and the literature. In practice, financial accounting information is for both internal (such as managers accountants) and external users (such as investors, creditors, consultants, customers, competitors, government, and others). Management accounting information is limited to internal users, especially managers and accountants who need management accounting tools to help them in their decision-making process (for further information see chapter three section 3-2 in this study).

Management accounting can provide appropriate information for planning, decision-making, control, and performance evaluation (Drury, 2006). The information obtained by management accounting should be useful to managers and staff inside an organisation. According to Atkinson *et al.*, (2007) it is important that the data collected from within an organization for the purpose of management accounting is accurate and timely to enable the decision making process of those who utilize this internal organisational information. Management accounting information is rarely utilised or distributed outside the source organization (Atkinson *et al.*, 2007).

Different types of organisation whether they are public or private institutions need to use management accounting information gathering techniques to gather appropriate information which enables them to manage their organisations. This ability to collect and utilise organisational information for the purpose of management accounting has increasingly become more important within public sector organizations will the increasing utilization of private sector management accounting techniques. (Monsen, 2006; Heald, 2005; Lye *et al.*, 2005). This cross over trend of private sector management accounting techniques being employed in the public sector can be observed around the world in different countries. Lambert and Lapsley (2006) highlight that public sector organisations rely on management accounting techniques in order to achieve their targets. The public sector needs to plan and control public resources and deliver public services effectively. In developed countries modern management accounting practices of public services have become necessary to meet this need to manage the available resources and service provision requirements. Many authors around the world have studied and investigated the role of management accounting techniques in the public sector (Helden and Northcott, 2010). A discussion of the current trends around the world will be covered in greater detail within Chapter Three. Different developed and developing countries utilise different management accounting techniques in their public sectors such as costing, budgeting, performance measurement tools, balanced scored card, Activity-Based Management (ABM) and Activity-Based Costing (ABC) (Jackson and Lapsley, 2003).

With the lifting of United Nations (UN) sanctions imposed on Libya and the transition of the Libyan economy from a centrally planned to a market-based system, which was launched in the Development Plan of 2001(Alfaitori, 2007). Libya is facing significant changes in its public and private sectors and therefore the management accounting techniques used to deliver efficiency and effectiveness in public sector organisations, including the Libyan People's Committees of Municipalities [LPCMs], have changed as local government aims to provide public services (such as education, health, and police) to the Libyan citizens as non-profit public organisations (Salama and Flanagan, 2005; Sharif, 2000). The LPCMs are functionally and geographically based and became responsible for local and regional administration from the 2nd March 1977 (Alwerfale, 2006). The LPCMs have a relationship with some national government organisations such as: the General People's Committee (the General PC), the General People's Committee of Treasury (the General PC of Treasury), and the General People's Committee of Inspection and Control (the General PC of Inspection and Control) which play different roles for coordinating and controlling the revenue and expenditure of LPCMs (for further information see chapter 2 sections 2-11 and 2-12). Accordingly, the Libyan central government agencies, need to understand the management accounting practices used by LPCMs for providing information for planning, control, decision making and performance evaluation, through explaining and understanding the current management accounting practices in LPCMs and their ability to deliver efficient and effective public sector services within the changing Libyan economic environment.

1-3 The research problem and Justification

The Libyan economy changed dramatically with the discovery of oil in the 1960s. With this increased income stream, the central government began a drive for economic development. After a period of economic stagnation in Libya during the 1990s (Agnaia, 1997), the development prospects in Libya have now improved considerably. The national economy grew significantly after the final lifting in 2003 of UN sanctions imposed on Libya (Salama and Flanagan, 2005; UN, 2007). These economic changes have led the Libyan government to decide to allow internal and foreign investors to invest in the public sector, and thus this also led to competition between investors (private sector) and the public sector, including the LPCMs as a part of the public sector in Libya for the provision of public services to citizens (Salama and Flanagan, 2005). Accordingly, it is necessary to study the current practices of management accounting techniques within the public sector and determine the appropriateness of these practices for monitoring and evaluation of the efficiency and effectiveness of the performance of those sectors in the new businesses environment (Ashore, 2006).

The LPCMs' expenditures have increased in different aspects such as education, health, security and other service provision areas. At the same time their direct local income has decreased during the last decade. This decrease in income has coincided with the privatization of some public sector enterprises (such as water, cleaning) and has therefore resulted in the LPCMs becoming dependent on central government grants to finance their activities (El Sihairi, 2006). However, the Libyan government has recognised that the oil resources are finite, and therefore it has chosen to focus on diversifying its income sources as indicated in the Development Plans since 2001

(Fayad, 2006). A detailed discussion of the government fiscal policies, accounting management strategies and income streams will be discussed in Chapter Two. Consequently, the current study focuses on the economic and environmental changes after the final lifting of the embargo on Libya and their impact on the current practice of management accounting techniques in LPCMs. In this respect, the continuing environmental changes will continue to create further change in the management accounting utilised within the public sector (Scapens *et al.*, 2003; Mcwatters *et al.*, 2008). Investigative studies are needed by all participants in the Libyan economy to determine whether or not the LPCMs have modified their implementation of management accounting techniques to meet the environmental challenges of the changing economic structures. The challenges which are facing the Libyan economy are expected to have significant effects upon the management accounting practices for the public sector states Al-Badre (2007) and as a result these organisations such as LPCM need to improve their accounting information systems from time to time to meet new challenges and remain effective service providers. Currently there is an information knowledge gap within the public sector within Libya according to Al-Badre (2007) how these recent changes are being addressed via the various LPCMs will be investigated. The impact of the changing funding streams and the economic requirements of LPCMs to meet the increasing service demands of the population need to be investigated in relation to the utilisation of management accounting techniques to meet the environmental challenges Within the literature of management accounting in local government, there are a small number of empirical studies relating to developing countries, in particular Arab countries, which have discussed the practice of using management accounting techniques within local government and the factors that have affected those practices. In this regard, Wallace (1990) referred to the dearth of studies focusing on the role of management accounting in the public sector in developing countries. Wallace (1990) argues that more descriptive studies are needed on various developing countries not reported within the literature base. Pollitt (2006) reiterates the call for additional research studies to be undertaken to address the contextual needs of developing countries public sector accounting and how the various developing countries are meeting the challenges they face. In Arab countries, Al-Dhowaihy, (2003) states that further studies should be undertaken in other developing countries to investigate the implementation of management accounting practices in government organisations. Ahmad and Gao (2004) concluded that further accounting research in Libya was needed to improve the current knowledge base. There is no empirical evidence providing an extensive explanation of the management accounting practices utilised within the LPCMs. This study is the first attempt to investigate management accounting practices and the factors that might impact on these practices within the LPCMs. Therefore, the current study contributes to the limited studies of management accounting practices, and it is an attempt to remedy the shortage and fill the gap in the management accounting literature in Arab countries, such as Libya.

Based on the shortcomings of the existing knowledge base, there is a need to study and explain the current practices of management accounting techniques and the factors which have an impact on those practices in LPCMs within the current Libyan business environment. Further, the results of this study will be compared with other previous related studies of developing countries such as Al-Dhowaihy, (2003); Ouda, (2003); Waweru *et al.*, (2004); Oliorilanto, (2008). This study focuses on the current practices utilized within Libyan organizations to identify trends that can be utilized to progress the development of management accounting techniques. The researcher has been motivated to address the existing knowledge based on his work experience within Libya as a Financial Controller for LPCMs (See Appendix F). From this professional background the researcher has observed anecdotal incidents that have led to this research as there are concerns about the current practices in place not meeting the needs as a result of the changing Libyan business environment.

1-4 The research aims and objectives

The primary aims of the study are to:

- To explore and examine the current practices of management accounting techniques within LPCMs and their role in providing information for planning, control, decision making and performance evaluation.
- To analyse the selected factors that may be have affected those practices, especially after the final lifting of UN sanctions on Libya.

The objectives of the study can be outlined as follows:

1) To examine the role of management accounting practices in LPCMs through:-

- Investigating the current practices of budget preparation in LPCMs.
- Analysing the extent of use of budgetary control information in LPCMs.
- Assessing the extent of use of performance measurement methods in LPCMs.
- Examining medium and long-term financial planning in LPCMs

2) To evaluate the factors that might have an impact on the management accounting practices in LPCMs.

This objective will investigate the importance of eleven factors which are selected by a focus group of 12 Libyan PhD accounting students at Liverpool JMU and factors that emerged from previous studies such as Al-Dhowaihy, (2003); Ouda, (2003); Waweru *et al.*, (2004); Oliorilanto, (2008). These factors are: high level management support, management accounting training programmes, motivation systems, financial resources for accounting development, the use of computer systems for management accounting purposes, accounting research in Libya, Professional accounting bodies in Libya, accounting education in Libya, co-operation between universities and LPCMs, economic changes, and policy of government. This objective will assess the importance of these factors on management accounting practices in LPCMs, through participants' views and other studies in developing countries.

3) To determine strengths and weaknesses of the current practices of management accounting techniques in use in LPCMs.

Some previous related studies conducted in developing and developed countries identified the strengths and weaknesses of the management accounting practices of public sector. This investigation will enable the effectiveness of management accounting techniques to be evaluated and thus, this objective will be an opportunity for improving the current practice through identifying the shortcomings and strengths of these practices based on participants' views and previous related studies.

1-5 The research questions

To achieve these objectives some research questions were derived from suggestions made by a focus group of 12 Libyan PhD accounting students at Liverpool JMU, who have sufficient knowledge of accounting in the Libyan business environment. Some ideas are derived from prior related studies in developing countries such as

Al-Dhowaihy, (2003); Ouda, (2003); Waweru *et al.*, (2004); Oliorilanto, (2008). Consequently, the research attempts to answer the following research questions:

1. What is the role of management accounting techniques in use by LPCMs?
    a. What is the process of budget preparation in LPCMs?
    b. To what extent do the management accounting techniques in LPCMs provide budgetary control information?
    c. To what extent are performance measurements used in the LPCMs?
    d. To what extent do LPCMs prepare medium and long-term financial plans?
2. What factors affect the management accounting practices in LPCMs in the current Libyan business environment?
3. Are there any differences between the attitudes of financial managers, financial controllers and managers of services and projects in LPCMs towards the current practices of management accounting techniques used by their PCMs?
4. What are the strengths and weaknesses of the current practices of management accounting techniques in LPCMs?

1-6 Research Methodology

As will be discussed in more detail in Chapter Four, there are qualitative and quantitative approaches that can be used in this study. Both research approaches and their methods for collecting data such as questionnaire surveys and semi-structured interviews have been employed in previous related studies in developing countries such as Al-Dhowaihy, (2003); Ouda, (2003); Waweru *et al.*, (2004); Oliorilanto, (2008). Each method has advantages and disadvantages, and therefore studies that use only one method are more vulnerable to mistakes linked to that particular method than those studies that use multiple methods where different types of data provide cross-data validity checks or triangulation (Robson, 2002; Collis and Hussey, 2003). Hence, to avoid the weaknesses of using only one method and to achieve useful results, this study has utilized mixed methods, which include questionnaire surveys and semi-structured interviews to provide data which could be triangulated. By combining and comparing the findings from the questionnaire with the findings from the semi-structured interviews, the researcher was enabled to implement an in-depth investigation of the factors that affected the management accounting practices. The use of two research methods supplements each other to gather comprehensive information and highlight the participants' views of the current practices of management accounting in LPCMs.

The questionnaire is used as a quantitative approach in three main ways. Firstly, it involves obtaining background information about LPCMs. Secondly, the questionnaire gathers empirical data in relation to the current practices management accounting techniques by LPCMs. Finally, the method explores and evaluates the factors that have an impact on the management accounting practices. In order to obtain this information the study targeted the financial managers, financial controllers and managers of services and projects in LPCMs. This defined population group was targeted in every Libyan LPCMs and as a result 136 questionnaires were distributed to the target participants (for further information see chapter 4 section 4-4-1).

In order to obtain a more in-depth understanding of the current practices of management accounting techniques in LPCMs, semi-structured interviews were conducted with 20 selected officials from the five targeted groups which are Libyan government bodies (the General PC (Cabinet), the General PC of Treasury (Ministry of Treasury), Financial Services Controls of PCMs, the General People's Committee of Planning (General PC of Planning) (Ministry of Planning), the General PC of Inspection and Control (General Audit Bureau)). These Libyan organisational structures have a strong relationship with LPCMs and it is important to gather the perceptions and attitudes of the members of the central government agencies have towards the current practices of management accounting techniques within LPCMs. The attitudes of central government agencies need to be compared to the perceptions of other sector participants and this comparison was undertaken through the use of semi-structured interviews with data from questionnaires to ascertain to what extent the reliability and results differ (see chapter five section 4-4-2).

The statistical methods applied to the data collected by questionnaires were analysed by descriptive statistical analysis using non-parametric tests such as the Kruskal-Wallis test. For the semi-structured interviews the data collected was analysed by using a content analysis technique which focuses on key words and this was classified manually because the small number of sample of interviews.

1-7 Structure of the research

This thesis consists of eight chapters.

Chapter One provides background information to this study. It outlines the aims of the research, justification for the research, research methodology and contribution to knowledge and significance of the research.

Chapter Two explores economic, political, managerial and social aspects which have historically influenced Libya as well as the current government fiscal policies and accounting practices. These factors may have an impact on the management accounting techniques in Libya. Therefore, understanding these aspects may help understand and explain the application of management accounting techniques and the factors that have affected the application of these techniques. The chapter provides Libyan historical background and governance; political system and key aspects of economic transformation that affects the development of accounting in Libya. It explains the development plans, Libyan exports and imports, use of resources, accounting profession, legal factors and effect on accounting practice, the management accounting system in LPCMs and the relationship between the LPCMs and some governmental bodies.

Chapter Three reviews the management accounting techniques to explain the development of these techniques. It also assesses the application of management accounting to facilitate an understanding of those issues that relate to the techniques employed in the public sector. In this regard, this chapter focuses on the role of management accounting and its techniques in local government, management accounting in the public sector, planning and budgeting such as strategic planning, the annual and capital budget preparation, budgetary control, measurement and reporting, performance evaluation and accountability. This chapter also analyses current and previous studies of management accounting techniques in developing countries. Therefore, the literature review in this chapter is to identify the management accounting techniques available. The review covers previous studies related to management accounting in the local governments of developing countries and indicates the need for more research in this field and highlights a gap in this literature. Therefore, the main purpose of this research aims to contribute to extend this area of research to fill this gap.

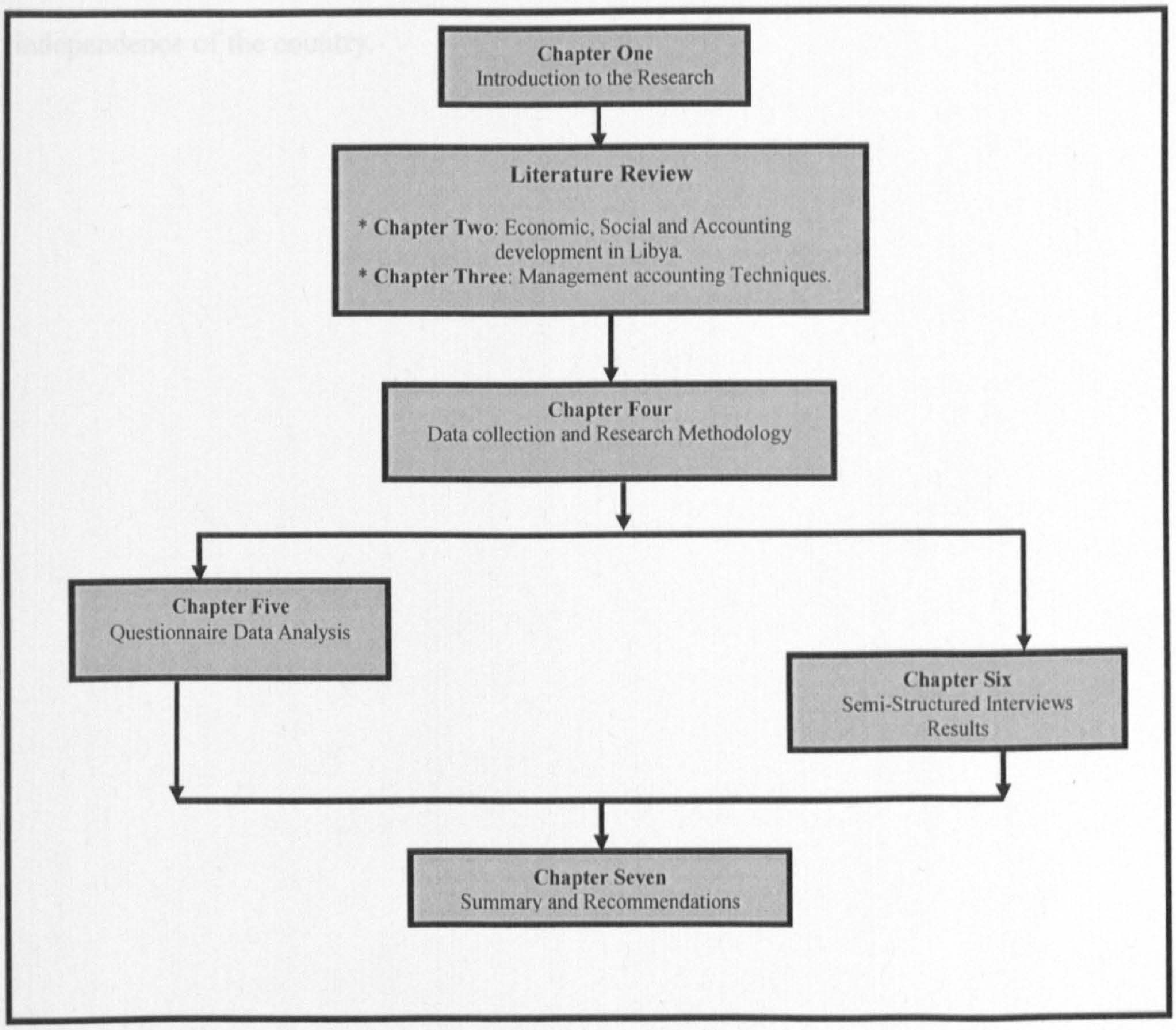
Chapter Four discusses the research methodology, which is used to determine a design strategy that is appropriate for this study. The positivist paradigm has been adopted in this study through using mixed methods (qualitative and quantitative). This chapter assesses the data collection methods, namely, questionnaires and semi-structured interviews which are the main methods used to collect the data. The questionnaire administration, sample of study, questionnaire design, questionnaire structure, distribution and response rate of the questionnaire, and reliability of responses are discussed. The semi-structured interview method, interview questions and sample are also outlined. This chapter also highlights the statistical analysis applied on the collected data by questionnaires which is analysed by descriptive statistics for achieving the main objectives of study.

Chapter Five examines the questionnaire results which are obtained by using descriptive statistical analysis to analyse the data of questionnaire which is concerned with management accounting techniques within LPCMs and the factors that have affected the current practices of management accounting techniques after lifting the embargo on Libya.

Chapter Six analyses the data collected by interviews according to the research objectives through the information obtained from the target interviewees. The aim of this chapter is to assess the findings of semi-structured interviews about budget preparation, development plans, budget implementation, budgetary control and performance evaluation. This chapter also determines and analyses the weaknesses, strengths and proposed changes of the management accounting system and factors that affect the application of management accounting techniques.

Chapter Seven presents a summary and conclusions of this study and makes recommendations and suggestions for future research.

Figure 1-1: The structure of the thesis



1-8 Summary

Management accounting information is necessary to meet the challenge presented in this chapter. This study explains management accounting practices in local government in developing countries, focusing particularly on LPCMs. This chapter outlines the contents of the thesis. It explains the justification for the research, followed by the research aims and objectives, research questions and then highlights the structure of the research by providing brief notes chapter-by-chapter. The following chapter will discuss the characteristics of the Libyan business environment and the main changes which have taken place in this environment since the independence of the country.

Chapter Two

Chapter Two

Economic, Social and Accounting developments in Libya

2-1 Introduction:

Libya has faced many economic and political changes at different stages of its history such as the colonial rule stage from 1551-1951 (Ottoman Empire, Italy and UK) and the discovery of oil stage in 1960 (AL-Hasade, 2007).

The current practices of management accounting techniques in LPCMs cannot be studied in isolation from the environment in terms of economic, political, managerial and social factors. These factors may affect management accounting practices for providing clear and accurate information at an appropriate time of planning, controlling, decision making and performance evaluation. Therefore, understanding these factors helps to understand and explain the management accounting practices in LPCMs and the factors that have affected these practices.

This chapter discuses the historical background and governance, political systems, economic transformation, development plans, Libyan exports and imports, effective use of resources, accounting profession, legal factors and effect on accounting practice, LPCMs, the management accounting system of government bodies and the relationship between the LPCMs and some central government bodies. In doing so, it will provide the perspective needed to explain how and why accounting systems have developed in Libya today.

2-2 The rationale behind discussing the Libyan business environment

Previous research, especially in the former socialist and transition countries, has demonstrated the relationship between economic reforms and changes in management accounting practices (Sharma, 2000; Haidma and Laats, 2002; Szychta, 2002; O'Connor *et al.*, 2004; Waweru, *et al.*, 2004). The findings of this research suggest that factors related to the broad business environment, such as the political climate and government regulations, have a significant impact on management accounting practices (see for example, Bakre, 2006; Watson *et al.*, 2007; Abulgasem and Alukel, 2007; Aggestam, 2009). In addition, relating these practices to specific historical events in the country in which they are implemented is the only way of understanding them according to Amat *et al.*, (1994). Alawattage *et al.*, (2007) and Wickramasinghe and Hopper (2005) accounting researchers, particularly in less developed countries, need to address the issues of culture and politics and how accounting is intertwined within these influences (Alawattage *et al.*, 2007; Wickramasinghe and Hopper, 2005). In turn, organisations have to cope with the market changes in order to survive and succeed (Jaruga and Ho, 2002). It is also argued that country-specific characteristics affect management accounting systems in terms of the techniques adopted and the implementation of the techniques. Organisations within one country can show similarities in their functioning not shared by organisations operating in other contexts (Bhimani, 1992).

Libya like any country is involved in collaborative support arrangements and one called the Arab Maghreb Union Countries [AMUC] provides an opportunity for this research to be expanded and utilised in other areas. The uniqueness of Libya has some shared similarities with its near neighbours which are participants in the AMUC (Alwerfale, 2006).

Based on the above, it seems to be rational to provide a historical background on the context in which this research study is conducted, shedding light on the process of transforming the Libyan economy from a centrally controlled system dominated by the state-owned sector to a market-based system.

2-3 Libyan Historical Background and Governance

Libya is a developing Arab state and occupies a strategic location in the north-central part of Africa as it links Eastern with Western Africa. Islam is the state religion and the country occupies an area of almost 1,760,000 million square kilometres with a population of 5.5 million. Arabic is the official language that characterises Libyan culture. Libya was originally inhabited by Berbers, but Arabs invaded the territory in AD 642, bringing Islam to the region. Arabs ruled the territory now called Libya until the 1500s when it was invaded and controlled by the Ottoman Empire for about 400 years (AL-Hasade, 2007). In the early twentieth century, the Italians invaded Libya and were the last occupiers just before the British occupation following the World War II. Whilst Libya was under Italian colonial rule, the Bedouins were the main opposition party who championed the case for independence and self rule, (World Bank 1960: 26 cited in Shareia, 2004). The country was divided into three main districts and was initially known as Cyrenaica in the East of Libya, Fezzan in the South of Libya and Tripolitania in the West of Libya (Vandewalle, 2006). The basic infrastructures such as irrigation for agriculture, water, roads and the major ports for trade and other amenities were set up, however, education for the local indigenous citizens was not encouraged by the occupying power (World Markets Research Centre, 2002). A report from the World Bank states that thousands of Libyans, especially those who fled the country after the Italian invasion, enlisted en-masse with the Allied forces during World War II and helped to defeat Mussolini and the Italian rulers (World Bank, 1960). The defeat of Mussolini and the Italians in World War II was followed by the end of Italian colonial rule in Libya (Ham, 2007).

With the end of Italian colonial rule, the United Kingdom (UK) and France in a joint effort established trading posts and administrative rule shortly after the exit of the Italians, but this attempt to impose a new colonial system upon Libya was resisted fiercely by King Idris and other members of the Sanusi family along with the existing powerful tribal political players within Libya. Prior to World War II, King Idris was a regional Emir. After the war he was recognized as the Emir of his family region of Cyrenaica and was invited to become the Emir of Tripolitania. With the removal of the Italian colonial infrastructure he was invited to become the King of Libya. As a result of the negotiations and representations to the United Nations [UN] a declaration of independence of the United Kingdom of Libya occurred in 1951. This declaration of independence did not alter the economic structure of Libya significantly other than who was in power and making the decisions about the activities of the public services. This government system was through the Royal Court appointed officials and this system of appointments and control was in place until the revolution of 1969. With the declaration of independence, the main challenges for the new state became economic and social as it sought grants and foreign aid from the UN and other external bodies (Ham, 2007).

2-4 Political system

As the result of the military coup in 1969 a new political system was introduced in Libya. The military coup introduced a Marxist-socialist political system and as part of this new power structure for Libya the Revolutionary Command Council [RCC] was formed on 1st September 1969. The RCC has been the ruling authority and has been sustained ever since despite all the tensions and conflicts with foreign countries, confrontation with the United States and UN sanctions from April 1992 to April 1999 (Anderson, 2001).

The Libyan policy on the economy began formally in 1973 with a cultural or popular revolution. From 1st September 1969 the RCC aimed to fight bureaucratic inefficiency, the lack of public interest and participation in the governmental system, and the problems of national political co-ordination (Bearman, 1986). In 1977 the official name of the country was changed to "The Socialist People's Libyan Arab Jamahiriya." The term "Jamahiriya" is translated to mean 'power to the masses" (Wright, 1981: 191). The Great Socialist People's Libyan Arab Jamahiriya (GSPLAJ) is the official name of Libya currently. The GSPLAJ was established according to the '*Third Universal Theory*' of the Green Book by Colonel Muammar Qadhafi (Qadhafi, 1981).

Furthermore, changes were initiated in 1977 when the General People's Congress [GPC] was created to replace the RCC. After the vacuum of the imperial system the GPC was part of a process to implement elected government representation for the population which the general public had not had previously under the various different government systems (Daniel *et al.*, 2004).

2-4-1 Political Participation

Another action to improved the third estates participation in the political governance of Libya was the creation of LPCMs as they were functionally and geographically based and became responsible for local and regional administration also known as municipality governance. In the scope of their administrative and regulatory tasks and the method of their members' selection, the LPCMs embodied the concept of direct democracy that Qadhafi propounded in the first volume of The Green Book in 1980 (Saleh, 2004).

The political sector consists of the Basic People's Congress [BPC] for each of the 1,500 different villages when people debate and take decisions. Local members of the community are elected to the BPC and from this legislative elected forum may become members of the GPC executive level of the Libyan government or members of the local municipal government, PCM. It is possible for an elected member of the BPC to have dual roles in the LPCM and the GPC at the same time theoretically working at the local and national executive level of the government simultaneously (Anderson, 2001).

The LPCM organizations devise policy and plans which are then submitted to the national executive agencies responsible for the policy portfolio area to be reviewed for the feasibility and policy acceptance within the government agencies. The policy portfolio executives do not have the authority to confirm and accept these documents. The initial legislative approval must be gained from the BPC who then refer the plans and policies onto the executive level of elected officials, the GPC, who will then review and debate these plans (Alwerfale, 2006). If approval is given by the GPC for the implementation of policy and plans, notification and approval granted to the national policy portfolio area to implement the funding and administrative changes and this allows the national policy portfolio executive agency to distribute funds and resources to the LPCMs. It then becomes the responsibility of the LPCMs to implement the services and provide the resources to the plan objectives (Alwerfale, 2006).

An example of this in action is when one of the LPCM decides that a new school needs to be built in their area. The plan will be developed along with the costing information and this will be referred to the national education department (the policy portfolio area responsible) who will review the plans to ensure that it meets the current standards and budgetary requirements. The Education Department will negotiate with the Treasury department to ensure that this plan is financially possible. If the Treasury department approves the plans advising that there is funding available the plan will then be forwarded to the BPC for initial legislative approval. If the plan makes it through the lower legislative area it is then transferred to executive legislative committee the GPC. It is not until the executive approval is in place from the GPC can the various national departments such as the Education Department and the Treasury delegate and transfer funding to the LPCMs.

2-4-2 Socialist System

The embargo, which lasted ten years, weighed heavily on Libya (Saleh, 2004). This worsened the economic situation induced by the orientation towards the socialist model. The break with the past took place in June 2003, when the Libyan Government, adopted a liberal economic policy (Anderson, 2001). The Libyan Government set itself the goal of reducing poverty and maintaining efficiency in the public sector whilst attracting foreign investors (Saleh, 2004). The lifting of UN sanctions in September 2003 allowed for the return of foreign investment and currency into Libya. The Libyan government intends to implement radical reforms which have been signaled by the recent liberalization measures and an extensive programme for privatization (Saleh, 2004). By 2008, Salah (2004) states the Libyan Government expected that some 360 Libyan companies would be privatized and a total of 41 foreign companies would be attracted to open offices in Libya. Due to the complex decision making process found in the political structure of Libya the current rate of government privatization has only been a total of 110 companies within the last decade according to the Libyan Investment (2010). Libyan Investment Authority (2010) advises that there is still a strong wish to privatise more government companies to improve the economic structure of the Libyan economy.

2-4-3 Evaluation of the Transition Management

With a good economic and social development level combined with a relatively peaceful co-existence amongst the main Islamist groups, and low level of conflict there is a peaceful state with the enabling environment for future growth, (Saleh, 2004). Mogherbi (2003a) however argues that the bureaucratic administration and unrestricted monopoly of state institutions is however threatening the reforms of the new regime which is poised to ensure deregulation and encourage a level playing field for all investors. However, it is necessary to consider the difficult global economic conditions as well as the negative impact of UN sanctions on Libya, the revolutionary leadership has all but sustained itself and this expertise in Libya is attributed to the higher number of its citizens who are and were foreign students. The measures for the solution of the economic problems and tasks have been adopted without conflict from the political participation bodies (Saleh, 2004).

2-5 The Libyan Economy

2-5-1 Key Aspects of Economic Transformation

The Libyan economy mainly depended on agriculture as a source of income until the discovery of oil. In the 1960s, the government began a drive for economic development, Agnaia (1997). Libya depends on oil as the major source of income, Selway (2000). Based on the United Nations Human Development Index, (UN, 2002; 2007), Libya was placed 4th in terms of socio-economic infrastructures which enhanced the life of its citizen's human development, which in the African continental context signifies a good placement. This development rating is largely due to the high oil revenues which has generated the income to fund the basic infrastructure programs for healthcare, education and social equality (UN 2002 & 2007).

Since the repeal of UN sanctions in September 2003, the fundamental reforms of the Libyan economy have been based on economic liberalization and integration into the global economy. These reforms to the economic structure have formed the basis for real economic strengths, building on the income from oil (Salama and Flanagan, 2005). According to Shareia (2004) in March 2004, the GPC approved a series of laws including *Foreign Investment Law No. 5* and new schemes to attract international investors and to stimulate economic activity. *Foreign Investment Law No. 5* is the legislative changes which opens the Libyan economy to foreign investment. The legislative and development schemes include the reduction of income tax, simplified registration for companies, recognising the importance of the private sector and the permission for individuals to rent land and buildings, which was previously prohibited (Shareia, 2004).

The economy has largely depended on oil as the main source of wealth. The Central Bank of Libya (2008) states that the country's Gross Domestic Product (GDP) has grown at 6.1 %, to achieve 51.7 Billion Libyan Dinars (L.D) (US$ 41.36b), in 2008. The growth resulted from non oil economic sectors is 7.1 % while the oil sector has achieved growth of 5.2 % (Central Bank of Libya, 2008). This improvement in the non-oil sector is due to the Libyan government concerns with the construction sector

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and implementation of infrastructure projects. In addition to the transformation of the Libyan economy, the public sector plays an important role through increasing the activities in the national economy. The Oil Sector contributes 52.5 % of GDP while the non-Oil Sector contributes 47.5% which can be observed in the GDP Table 2-1 below from the Central Bank of Libya (2008).

The average per capita GDP is about 362 L.D (US$ 289.6) of GDP, which was increased approximately to 9332 L.D (US$ 7465.6) in 2008 from 8970 L.D (US$ 7176) during 2007 (see Table 2-2).

Table 2-1: GDP by economic sectors at constant prices

L.D denotes to the Libyan currency, exchange rate D.L 1= US$ 0.80

Table 2-2: Per Capita Income in Libya in the period 2006-2008 in Libyan Dinars

Source: Central Bank of Libya (2008).

2-5-2 Competition and Foreign Investments

The Libyan state economy is dominated by state ownership of national organisations, even after the approval of the revolution for more productive investment and greater efficiency since 2000 (Anderson, 2001). The transition in Libya from a planned economy to a market economy commenced after the final lifting of UN sanctions on Libya. This transition has resulted in fundamental changes which include the restructuring of state owned enterprises, a noticeable growth in foreign direct investment, and an emerging private sector (Salama and Flanagan, 2005). Moreover, the private sector is increasingly active and the quick implementation of the reform of *Foreign Investment Law No. 5* was several years overdue (Shareia, 2004). *Foreign Investment Law No. 5* aims at encouraging foreign capital investment within the overall policy of the State and the targets of economic and social development. In particular, the law according to Ham (2007) encourages foreign investments in areas that result in transferring modern technology, variation of income resources, and contributing to the development of the national products that enable entry into the international markets. In this regard the development plan was announced in 2001 to diversify the economy (Ham, 2007).

The major barrier to competition and investments is over three decades of dominant sociological ideology promoted by the government which favours monopolies and the public sector. For progress is largely dependent upon the extent of changes that the revolutionary government and bureaucratic agents of the government implement to encourage the deregulation and opening up of the markets for a level playing field and discourages the current monopolies of state enterprises and state banks. The effect of this historical and structural effect on current trends can be observed in various market sectors of the Libyan economy such as oil production; aviation, steel production that will remain under the state's control or how the banking sector continues to be dominated by state banks (Shareia, 2004).

2-5-3 Development of Local Capacity

In order to encourage the development of local capacity content, the Libyan government provides limits on imports of certain products including alcohol, poultry, fresh vegetables, canned food, tea and certain types of coffee, furs, luxury cars, food products with pork fat and goods from Israel (Mogherbi, 2003b). The policy also aims to increase the volume of investments in the country especially in areas where their expertise is lacking. In those areas the Libyan government grants foreign firms a number of important benefits including: full exemption from taxes on equipment and machinery needed for the project; exemption for 5 years from import taxes on them; exemption for 5 years of the project from income tax, exemption of export products from production taxes and export (General People's Congress, 2006). Investments are usually in the form of a joint-venture arrangement, preferably in health, industry, tourism, services and agriculture sectors. There is high demand, for investment in hotel infrastructure and hospitals, and acquisition of equipment for health and know-how (Mogherbi, 2003b).

2-5-4 Monetary and Price Stability

The Libyan Central Bank has been consistent in setting the interest rate to be on a par with inflation and exchange rate policy, and operates as a fair and balanced institution in comparison to its previous activities which were mainly influenced by the socialist ideology (Shareia, 2004). This change to the central bank was another effect of the *Law No.5* and the other market changing policies of 2004. Inflation was reduced through appropriate measures to around 40 percent in 2005 and only eight percent in 2006 advise Libyan State documents (General People's Congress, 2006). The Libyan foreign debt to Russia consists of an amount of three to four billion U.S. dollars, this debt is a result of the previous political and economic agreements during the UN embargo and has not yet been repaid (General People's Congress, 2006).

2-5-5 Opportunities and Prospects of Libyan Market

Libya has taken a strategy of industrial development based on the gradual liberalization and the achievement of three objectives: (i) to replace imports with the encouragement of local production; (ii) growth of heavy industry and (iii) light industry development (Shareia, 2004). This, together with the UN suspension of the embargo should be able to ensure the growth of GDP. In particular, the composition of GDP by economic sectors is characterized by high incidence of services, oil and natural gas. The new strategy was also undertaken to diversify the production base (oil accounts for 90% of exports), improving infrastructure (housing, drinking water, and sewage), increase in investment and the creation of a free trade area. The Libyan government was willing to join and participate in the Euro-Med group as early as 2001 in order to sustain the level of cooperation between European Union [EU] and Mediterranean states, (General People's Congress, 2006; Shareia, 2004). Libya is a critical trading partner in view of its geographical location, and with the establishment of the open trading centre in the Maghreb, will make the country a bridge between EU and Mediterranean countries (Shareia, 2004).

2-5-6 International cooperation

The Libyan Government has since the mid-90s, taken the initiative for international co-operation firstly among its African neighbouring states with its development of the Sahel-Saharan States Community forums. Following the suspension of UN sanctions in April 1999, it operated a general foreign policy of political reconciliation with the aim of re-obtaining full foreign policy acceptance. Currently, Libya, for the first time since 1969 is committed to maintaining good relationships with all the countries bordering the Sahel-Saharan States Community (Terterove, 2002). Libya has achieved much with regards to cooperation with Western Europe, particularly with Britain and France, as well as other developed nations such as Canada and Australia. The relations are now normalized after the lifting of the sanctions (Terterove, 2002).

Russia, after the end of the Cold War, has a reduced relationship but has improved to a high level while relations with the People's Republic of China has been steadily expanded (Shareia, 2004). The American-Libyan relationship has improved since the lifting of sanctions and this improvement in the diplomatic relationship culminated with the visit of the USA Secretary of State, Condoleezza Rice in 2008, the highest USA official to visit Libya since 1958 (St John, 2008).

2-6 Development plans

Libya launched its first five-year plan for economic and social development through the Ministry of Planning. The First development plan was 1963-1968 (Vandewalle, 2006). The general aim of the 1963-1968 plan was to build up the Libyan economy and to reduce the deficit. The emphasis was put on agriculture, education, health and communication development for increasing non oil income sources (Abusneina, 1992). The increase in oil revenues during the period of 1963-1968 led to an increase in the final amount spent on development (The General PC of Planning, 1997).

The second Five-year plan 1969-1974 was never implemented due to the 1969 government change (Elmaihub, 1981). The increase in oil production that followed the 1969 revolution was accompanied by Libyan demands for higher oil prices, a greater share of revenues and more control over the development of the country's oil industry. In 1971, the Libyan government nationalised the holdings of British Petroleum in Libya (Carole, 1974). In 1973, it nationalised other oil companies operating in the country, which gave Libya control over its domestic oil production.

Libya began the preparation and implementation of development plans and transformation with the enactment of *Law No. 85* for the year 1970 regarding the planning and development affairs (Alzne, 2006).

A three-year development plan for 1973-1975 was launched in 1973, which focused on the oil industry (Taim and Saleh, 1988). The plan's projected goals included a growth rate in GDP of 9.2 % at an annual rate and a diversification of the economy that would decrease the country's dependence on the oil sector. The non-oil sector was expected to expand through channelling substantial long-term investments into agriculture and manufacturing (Vandewalle, 1998). The Strategy and objectives of 1973-1975 plan highlighted achieving growth of the national economy through the increase in growth rate of non-oil sectors. The allocations of this plan amounted to LD 2585.9 million; while expenditures amounted to LD 2203 million, the rate of implementation for the planned expenditure is 85.2%, while the plan achieved a growth rate in real GDP of 9.2% (Alzne, 2006).

A five-year development plan for 1976-1980 aimed to develop a broad range of economic activities that would continue to provide income after Libya's oil reserves had been exhausted. It envisaged an annual average increase of over 10% in GDP, 25 % in industrial output and near self-sufficiency in food output by 1980, (Wright, 1981). The allocations of this plan amounted to LD 8813 million; while expenditures amounted to LD 8259 million, the rate of implementation is 94% (Alzne, 2006). The 1976-1980 plan was later revised with more investment going to industry rather than agriculture (Wright, 1981).

The plan has played an important role for achieving the objectives made by the Libyan government. However, it is based heavily on oil revenues to finance expenditures. The role of the private sector in development activity was limited except for its contribution to the construction of housing, and also there was a low rate of investment in industry of 2.3% compared to the public sector (Alzne, 2006).

The five-year development plan for 1981-1985 was characterized by rising prices and oil revenue, which was reflected in a large volume of allocations, which amounted to 18.5 billion LD, distributed on a broad front of sectors with a focus on heavy industries, but lower oil prices during 1982 led to a reduction in the allocation to LD11.8 billion, while expenditures amounted to LD10.7 billion, the implementation rate for the planned expenditure was about 90.7 % and about 57.8 % compared to the original allocations (Alzne, 2006).

The falling oil prices dramatically reduced the government revenues and caused a decline in economic activities and the abandonment of central planning (The Economist Intelligence Unit, 1997-1998). Shortages in foreign exchange available to the Libyan government began to emerge as a problem in 1981 when oil sales first dropped as a result of market oversupply (Bearman, 1986). By 1985, Libyan oil revenues had fallen to their lowest level since the first Organisation of Petroleum Exporting Countries (OPEC) in 1973. This fall in oil revenues, which constituted over 61 % of the total GDP in 1980 and from which, in some years, the government had derived over 80 per cent of its revenue, caused a sharp contraction within the Libyan economy, (The General PC of planning 1997). Real GDP fell by almost 10 per cent between 1980 and 1981. The fall in oil prices accompanied by the UN sanctions (1992-1999), following the Pan Am flight disaster over Lockerbie in Scotland in 1988, contributed to the difficulties that the Libyan economy encountered. According to the country's estimates, the UN sanctions cost the country $18bn by 1996; $6bn in agriculture, $4bn in mining and industry, $3bn in the energy sector, and $5bn in other sectors (The Economist Intelligence Unit, 1997-1998).

The period without development plans 1986-2002. In this period the lower prices of oil led to disruption of development efforts, because of the uncertainty of estimated oil revenues. There was no long-term plan after the 1981-1985 plan. The State launched investment programmes and plans covering that period as follows:

A *Four-Year Programme of Economic and Social Transformation for 1986-1990* with the financial allocations to support the plan of about LD 10.9 billion was developed. This plan for economic and social transformation was adopted and implemented for several reasons such as the sharp decline in oil prices, the magnitude of the obligations and the lack of clarity and stability in many of the policies. This plan pointed out that the annual growth rate in GDP amounted to 3%, but it was negative in the non-oil sector at 1.7 % (Alzne, 2006).

The programme of economic and social transformation for 1991-1995 did not continue due to the aggravation of above-mentioned difficulties and this programme was replaced by the preparation and implementation of annual development budgets.

The allocation funding in this period was DL 5149 million, while the actual expenditures amounted to only LD 2351 million, (Alzne, 2006). To determine the main reason for that situation, Shakshook (2009) concluded that inflation is the main reason which resulted in changes for both the demand and supply, and an increase in the money supply. In this regard, Shakshook (2009) highlights that the Libyan state dealt with inflation in part through the reduction of expenditures which is led to a major downturn of Libya.

A Three-Year Programme for 1994-1996 was abandoned with few of its goals fulfilled. The total amount allocated to the 1994-1996 period was LD 2400 million of which only LD 1450.556 million, or 60 % of the total allocation, were actually invested. The decline in oil prices and the UN sanctions on the actual amount invested in comparison with the original allocations caused this shortfall. Only 31 % of the allocated amount to the agriculture sector was actually spent. In contrast, the amount spent on industry exceeded the original allocation by 140 %. The emphasis on the industrial sector led to an increase in the sector's contribution to GDP from 1.7 % in 1970 to 9.7 per cent in 1997 (The General PC of Planning, 1998).

However, the 1963-1968, 1973-1975, 1976-1980, 1981-1985 and 1994-1996 plans ran into difficulties for various reasons. The severe shortage of manpower, in terms of skilled and semi-skilled labour, had been the main constraint facing the Libyan public sector. The main problem of the first three plans and particularly the 1963-1968 plan was the availability of far more money to spend than had been foreseen due to unexpected oil revenue — the crisis of wealth. During the period 1963-1975, the government was only able to spend 42 % of the total oil revenue for development purposes, which resulted in a rapid increase in Libya's foreign exchange holdings, (Elmaihub, 1981). The manufacturing sector (Manufacturing, Mining and Quarrying

Sectors) accounted for 1.8 % and 11.2 % of the GDP in 1970 and 1996 respectively, (The General PC of Planning 1997). The agricultural sector contribution to the GDP has increased from 2.6 % in 1970 to 6.6 per cent in 1996 (The General PC of Planning, 1997).

The programme of economic and social transformation for 1997-2001 was prepared and implemented as annual development budgets, whereas their allocations in this period were about DL 6592 million, while expenditures amounted to LD 5196 million the implementation rate is 78.8%. During this period the national economy has witnessed many of the developments in the internal domestic market as well as greater access to the global international economy. Top management executives within the Libyan public sector were required to reconsider the planning preparation techniques to deliver efficiency and effectiveness to public services and accommodate with the new economic conditions (Alzne, 2006).

Consequently, the current study aims to examine the medium and long-term financial plans preparation through a discussion that explains and develops an understanding of how the current practices and management accounting techniques provide clear and accurate information to enable the delivery of efficient and effective LPCMs' services as a part of public sector.

The Libyan government prepared the Development Plan of 2002-2006 on the basis of studies, evaluation and restructuring of administrative sectors, this plan included four parts as following:

- Performance indicators were attached with this development plan for performance evaluation.

- The overall framework of the development plan.
- The development Plans of each People's Committees of Municipality [PCM].
- The development Plans of the other sectors.

The total investment volume of this plan was LD 35.8 billion. The public Treasury contributed to the financing of the plan (oil revenues) from 43.3% while the private sector and self-financing contributed 56.7%. This plan was not implemented for several reasons such as:

- The magnitude of existing obligations on projects.
- Multiple exchange rates and the growing phenomenon of the black market for currency.
- Economic and social development and domestic and international policy, which occurred during the year 2001 (Alzne, 2006).

The Development Plan (2006-2010) aims to achieve the main objectives of the previous plans, with more emphasis on the following objectives:

1. Reducing dependence on the oil sector.
2. Increasing the private sector's participation in the national economy. This objective will be achieved by continuing the privatisation policy of some public organisations, encouraging the establishment of more joint stock companies and enhancing the competitiveness of domestic products.
3. Diversifying local income sources, with focus on the education and health fees for non Libyan citizens, agriculture and industry sectors.
4. Encouraging research and development activities, to meet new international economic changes (The General PC of Planning, 2008).

In this regard, the Libyan government has had to focus on diversifying its income sources through increased non-oil revenues as indicated in the Development Plans since 2001. These plans tend to improve efficiency and effectiveness in public services, such as education, health, municipal services, the security services, water, electricity, transport and main goods, through training programs, importing information technology [IT] and modern software, and more interest in research. Therefore, this research aims to explain and understand the current practices of management accounting techniques in LPCMs, and to analyse the factors that may have an impact on those practices.

2-7 Libyan exports and imports

The importance of foreign trade in the process of economic development stems from the role it plays in expanding the production capacity and marketing potential of domestic products. It provides chances for domestic economies through opening channels of exchange and increasing the overall economic welfare through expanding the array of choices in consumption, investment and resource allocation. A country's foreign trade reflects the extent of the availability of productive resources and the country's ability to export. However, Libya is considered as a one sided economy that depends heavily on oil products which make up most of its exports (Central Bank of Libya, 2007).

2-7-1 Exports

The quantity of exported crude oil during 2007 was 536.8 Million barrels compared to 519.3 million barrels during 2006. Therefore, the increase was 17.5 million barrels 3.4% (See Table 2-3).

Table 2-3: Libyan oil production and exports in the period 2006-2007

Source: National Oil Corporation Quoted form Central Bank of Libya (2007)

The total of oil and non-oil exports in 2006, DL36.3 billion, compared to DL31.1 billion in 2005. The dominance of oil exports to almost the entire exports amounted to about 96.0% that due to lack of Libyan export diversification, while the non-oil Libyan exports accounted for only 4.0% of the total exports in 2006 (Central Bank of Libya, 2007).

The Libyan government has tried to increase its non-oil exports for many reasons that include the government policy to diversify production activities, the decline in oil prices in late 1980s and 1990s and OPEC's decision to reduce oil production, (Abusneina, 1992). On the other hand, Shamia (1991) described Libyan non-oil exports as negligible in value and quantity, and are characterised by both discontinuity and high costs of production.

2-7-2 Other exports include Gas and petrochemical products

The distinction between Libyan imported and exported products is uneven, with mainly crude oil, refined petroleum products and natural gas exported to Europe, and a dominance of imports of technology products into Libya. European countries, mainly Italy, Germany, Spain, France, UK, Turkey, Greece and Eastern Europe, are the main partners from which the country imports and to which it exports (Selway, 2000). Egypt, Morocco and Tunisia are the main Arab markets.

2-7-3 Imports

In the context of general economic policy, this seeks to increase the rates of economic growth through development plans and programmes. The import (goods and raw materials) was about DL8 billion in 2006(See Table 2-4).

Table2-4: Libyan exports and imports in the period 2004-2006

Source: Libyan bank center(2007)

2-8 Effective use of Resources

The lack of transparency on the use of budgetary resources has encouraged practices which has affected the effective disbursement and use of financial resources in Libyan public sector (in its main part from oil exports). As a result of the lack of transparency there has been a trend where a large proportion of financial resources have been channelled to additional unapproved expenses by various individuals' fraud (Mogherbi, 2003b; Ashore, 2006). To tackle the diminishing resources and the current economic structure along with the recent political policy changes, it is therefore necessary to have greater attentiveness in the accounting system as important information system within any public organisation (Saleh, 2004). Through training programmes for accountants Saleh (2004) advise of the benefits of work experience in developed countries (such as UK and USA), and the support of accounting research within Libya to improve professional practice. Accordingly, the current research aims to explain and understand the current practices of management accounting techniques in LPCMs as public organisations, and therefore this research will contribute to the Libyan accounting research.

In addition Libya's expenditure on defence was very high in 1980 and this policy portfolio area of the government was taking up 75% of whole budget allocation. This spending can be attributed to the conflict with the United States in the 1980's (Mogherbi, 2003b).

- The allocation of 20 billion LD in the "Great Artificial River project in Libya" based on the need to strengthen its macro-economic and operational effectiveness (Mogherbi, 2003b). In development plan for 2006-2010 the expected expenditure for this project is about 30 billion (The General PC of planning, 2008)

- Lack of accountability with established cronies where widespread corruption has not been significantly curtailed. Despite strong laws to prevent nepotism from the tribal social structure along with bribery and corruption statutes, financial and social incitements are still utilised to curry favours for government contracts (Mogherbi, 2003b).

2-9 Accounting profession

Accounting practices were brought into the country through different channels. The Italian accounting profession and the Italian Income Tax Law of 1923, which were implemented in Libya during the Italian colonisation period, influenced the evolution of enterprise accounting in Libya (Kilani, 1988). The Italian accounting practices were used because Italian firms had mainly employed Italian immigrants for administrative and accounting jobs as they were more qualified than the Libyan people at this time (Mahmud and Russell, 2003). The educational and technical training of Libyans was neglected and to a large extent Libyans were excluded from administrative positions in government and private enterprises during the Italian era. After the departure of Italians, the Libyan labour force was not adequately trained to implement the Italian accounting practices, which opened a chance of either developing the country's accounting profession or implementing other country's accounting practices. Many factors caused the Libyan accounting profession to follow the UK and the USA accounting systems. These factors included the presence of international companies in Libya (mainly from the UK and the USA), accounting education in Libya affected by the UK and the USA standards and practices (Buzied, 1998; Pratten and Mashat, 2009). This effect resulted from UK and USA companies during the period of colonialism (Ahmad and Gao, 2004).

The British influence was extended to the Libyan accounting education through the use of British education programmes and textbooks in the University of Libya. However, in the 1970s the American influence on Libyan accounting profession began to replace the British influence. American oil and non-oil companies increased their investments in Libya after the discovery of oil. They imported their accounting systems, implemented the American accounting principles which was accepted in Libyan laws and regulations, and employed Libyans in both accounting and administrative jobs. The Libyan accounting education system in the Faculty of Economics and Commerce at the University of Libya (currently Garyounis University) changed teaching to using American accounting-textbooks and methods. Therefore, two forces influenced the development of Libyan accounting. These were foreign companies operating in Libya and accounting education in Libya (Buzied, 1998; Ahmad and Gao, 2004). In addition, legal requirements also influenced the development of the Libyan accounting profession (Al-Badre, 2007).

In this regard, Mahmud and Russell (2003) concluded that the accounting practices in Libya may be influenced by the following:

1. Legal requirements (for example, government regulations and laws) that regulate Libya accounting practices.
2. The impact of accounting technology and know-how imported from other countries such as UK and USA through publications and the experience of qualified personnel and companies.
3. The impact of accounting education and the coordination between university and practitioners in the accounting field.
4. Some changes in the Libyan social, economic, political environment.

2-10 Legal Factors and Effect on Accounting Practice

The Libyan income tax and the mercantile tax laws are the two most important laws utilised by government in the regulation and control of management accounting practices in Libya, (El-Sharif, 1981). To address these issues according to Abozyredh (2007) the government has issued a number of laws to regulate accounting practice. The major impact on accounting practice thus has come mainly from the Financial System Law, Income Tax Law, and Accounting and Auditing Profession Law (Abozyredh, 2007).

2-10-1 Financial System Law

The edict promulgating the financial system law was first of all passed in 1967. Based on that edict, the financial system law gives full authority to the Secretary of the Treasury to regulate the budget and planning process for all expenditure in every government institution (Al-Badre, 2007). The Secretary of the Treasury appoints a financial controller for every local institution as a first step in achieving their target, and therefore it is contingent on the financial controller to prepare a report on public organisations of which copies must be sent to the relevant government bodies (AL-Hasade, 2007). The underlying principle behind this is that the Treasury maintains and carries out its role to monitor both revenue and expenditure of public organisations (Libya State, 1967). The main parts of the budgets include the expenditure section and the revenue section (Al-Badre, 2007).

2-10-2 The Income Tax Law

By 1968 the first Libyan Income tax law was passed, based mainly on the UK and US accounting model. The Libyan income tax law and the mercantile tax law are the two most important laws have been used by government to regulate management accounting practices in Libya about budget preparation and budgetary control reports regarding the revenues (Abozyredh, 2007). Whilst this form of law was first utilised in 1923 during the colonial period, it was based on the Italian system that was the colonial power at that time. The major differences with the 1968 version were that this was based mainly on the British model and contained many amendments to incorporate other interests such as groups and local circumstances (Abozyredh, 2007). In addition, in 1973, this same law was replaced by the income tax law number 64 which had a direct impact on the accounting practices in Libya (for instance records, consumption and change from cash- basis to modified cash- basis). This is the same law which is currently utilised by all government and private institutions (Shareia, 2004).

The downside with Libyan income tax is that it does not separate or distinguish between activities, whether it is income tax from unusual activities, income tax from the sale of non-material or material assets, or from ordinary activities, Article 65 of 1973 the income tax law (Shareia, 2004). After the amendment of 1973 a series of other amendments that incorporated the stamp law tax and as a result of a vote in the congress in 2004, the income tax law of 1964 was replaced with the new Income Tax Law 11. The new Income Tax 11 brought with it a number of changes and key of which included the removal of the public tax system for allowances that favoured those with high incomes. The aim of this taxation reform was to give the government the chance to implement radical reforms and thus encourage the growth and development of the private sector which had been dormant for decades as a result of government monopoly (General People's Congress, 2006).

2-10-3 Accounting and Auditing Profession Law

Pratten and Mashat, (2009) stated that the Accounting and Auditing Profession Law (hereafter Accounting Profession Law) no 116 was issued in 1973. Article 3 of the

Accounting Profession Law lists the Libyan Certified and Accountants Union's (hereafter Libyan Accountants and Auditors Association [LAAA]) objectives to:

• Regulate and support the accounting profession and increase accountants' and auditors' professional and educational efficiency.

• Organise national seminars and participate in international seminars and conferences and follow up international developments in the accounting and auditing profession.

The LAAA has not issued any statements regarding Libyan public sector accounting practices in terms of issuing or adopting accounting standards because the public sector accounting regulations were prepared by the General PC of Treasury. The Accounting Profession Law requires accountants and auditors to have at least a BSc in accounting or the equivalent and have more than 5 years work experience to be allowed to practice accounting and auditing services according to Article 24 of *Law No. 116* of 1973 (Libya State, 1974). However, there are no requirements that professionals employed by the public sector organisations and agencies hold LAAA certification nor do the LAAA provide any regulation or guidance about budget preparation and budgetary control for the public sector. In a study of the Libyan professional accounting services, Ashore (2006) indicated that the Libyan accountants' offices were concerned with auditing and bookkeeping, final accounts and liquidation services. Also, Ashore (2006) concluded that these offices did not take into their consideration the surrounding environment changes. Abofars (2008) identified that further studies need to be undertaken in the Libyan context to review the current practices of accounting in Libyan organisations according to the requirements of surrounding business environment, and that these new studies should therefore be included in the accounting curriculums, in order to obtain qualified accountants who have professional skills to meet the current challenges and developing changes in the Libyan business environment.

In line with the above, the primary aim of the current study is to explain and understand the current practices of management accounting techniques within LPCMs and the factors that may have affected those practices, especially after the final lifting of UN sanctions on Libya. Therefore, this study will contribute to the Libyan accounting literature by identifying a new area in this literature, and thus this study bridges a gap in the existing literature, as well as this study will assist management accountants to identify any weaknesses in the current practices of management accounting in LPCMs and to improve those practices to meet the requirements of Libyan business environment.

2-11 Libyan People's Committees of Municipalities (LPCMs)

The LPCMs provide civic services and deal with local development aspects such as social, political, and economic objectives. The LPCMs play a significant role in the public sector as organisations providing the basic services (such as education, health, and police) in the municipal area to the Libyan citizens (Alwerfale, 2006; Central Bank of Libya, 2007).

In this regard, Alwerfale (2006) concluded that the LPCMs are following-up the implementation of projects and plans, and control the expenditures of these projects and plans. LPCMs are entrusted with the distribution of development requirements based on the needs of specific areas in the municipalities.

2-11-1The brief for the historical changes of LPCMs

As mentioned above the Libyan leadership declared that the power must be transferred to the people; and LPCMs were established to offer direct democracy.

They are responsible for local and regional administration. By this declaration the Libyan state issued regulations and laws in order to regulate and determine LPCMs' aims (Alwerfale, 2006). In order to achieve these aims the Libyan government bodies such as LPCMs propose the expenditures and revenue as independent body, for preparing expenditures and revenues proposal, the Libyan government bodies and LPCMs employ management accounting practices to obtain accurate, clear information at time for delivering efficiency and effectiveness of their services (Al-Badre, 2007).

In this regard, Alwerfale (2006) indicated that Libya has been divided into 25 municipalities, but these municipalities were replaced by a new structure of 13 regions, which were soon abolished and revised system to 34 municipalities. Therefore, the LPCMs have been subject to expansion at least 10 times since the declaration of people power in 2nd March 1977. The rapid structural changes in the local government sector have resulted in some uncertainty about specific LPCMs' areas of responsibilities (see Table 2-5).

Table 2-5: The Current defined list of LPCMs

Name of LPCMs		
Ajdabiya	An Nuqat al Khams	Murzuq
Al Butnan	Ash Shati'	Nalut
Al Hizam al Akhdar	Az Zawiyah	Sabha
Al Jabal al Akhdar	Bani Walid	Sabratah Surman
Al Jifarah	Benghazi	Surt
Al Jufrah	Darnah	Tajura' wa an Nawahi al Arba'
Al Kufrah	Ghadamis	Tarabulus
Al Marj	Gharyan	Tarhunah-Masallatah
Al Marqab	Ghat	Wadi al Hayat
Al Qatrun	Jaghbub	Yafran-Jadu
Al Qubbah	Misratah	
Al Wahah	Mizdah	
Total= 34		

General People's Congress (The General PC 2005)

2-12 The Management Accounting System of Government Bodies

According to Abozyredh, (2007) and Kilani, (1988), the accounting profession in Libya can be traced back to the colonial rule where the main professionals were expatriates from overseas. In addition the economic and political changes put pressure on accounting practices to change, and the government issued some regulations and laws which regulate the accounting practices to meet the demands of business environment (Al-Hasade, 2007). Al-Badre, (2007) The Libyan financial law which was issued in 1967 has to be used as a guide for applying management accounting practices in Libyan government bodies. The aims of financial law concluded as follows:

1- To organise and coordinate the process of budget preparation, through determining the basis and techniques which must be used for preparing budgets.
2- To determine the financial and non-financial records as well as budgetary control and performance evaluation reports.
3- To control and monitor the budget implementation.

2-12-1 Budget Preparation

Libyan financial law and government statutory regulations are used to regulate and control the annual budget preparation and development plan. The annual budget consists of the revenue and expenditure of each government body. Initial proposals for the annual budget preparation are submitted to the General PC of Treasury which reviews and forwards the proposal to the BPC for discussion and is approved by the GPC for final approval (Al-Badre, (2007).

The General PC of Planning is the responsible portfolio area for the preparation of the national Development plans. The national portfolio area of Planning will consult with other government bodies or PCMs that include specific projects in their responsibility portfolio. The proposals from governmental bodies and PCMs are sent to the General PC of Treasury and the General PC of Planning for revision and submission to the General PC and BPC and then it will be approved by GPC (The General PC of Planning 2008).

2-12-2 The components of annual budget

The annual government budget is divided into two elements: expenditure and revenue.

2-12-2-1 Expenditure

This side includes usually three chapters as follows:

-Chapter one: Salaries and rewards such as basic salaries, allowances (housing, family, and so on), allowances for overseas employees (furniture, separation, and so on), and reward for non-employees (experts, committees, and so on).

-Chapter two: operational and maintenance expenditure excluding salaries such as materials, clothes for employees, maintenance (buildings, machinery and equipment….), training, spare parts, and so on.

-Chapter three: Services expenditure excluding salaries such as stationery, cleaning, travelling, entertainment, and so on (Gareeb, 2005).

2-12-2-2 Revenue

The revenues collected by government bodies and PCMs are under the tax legislation and service income, and additional income sources (see Chapters 5 and 6). Therefore, all government bodies' revenues are collected and transferred directly to central government. Those bodies still seem to essentially work as the spender of resources transferred according to several criteria (AL-Hasade, 2007; Central Bank of Libya, 2008). The income sources might be classified as follows:

Chapter one: Municipal taxes such as

- Property taxes
- Income taxes
- stamp taxes
- Health certificates.
- Road tax, and so on.

Chapter two: Fees such as

- Fees from licenses (e.g. licenses for buildings, parking meters ...)
- Penalties for contravening of municipal regulations.
- Water and waste water.

Chapter three: Property revenues such as

- Rents and sales
- Privatization of some public units.
- Income from financial participations in municipal business companies.

Chapter four:

- Other set by law

Chapter five: Support from central government, (General People's Congress, 2008).

2-12-3 Budget Implementation

The process of budget implementation in all governmental bodies is influenced by oil price changes. Periods of high oil prices increase the government's revenue leading to an increase in investment projects while periods of low oil prices may lead to cutbacks in projects and investments (El Sihairi, 2006). When the annual budget of state is approved by the GPC, the General PC of Treasury sends to each government body its own annual budget by the Financial Controllers of government body. Then the government bodies begin to implement their annual budgets (Al-Badre, 2007).

Gareeb (2005) indicated that there is internal and external control of the budget in central government bodies and PCMs. Internal control is applied by the audit offices as control department in central government bodies and PCMs for a pre-audit of all financial transactions, while external control is applied by financial controllers as representatives from the General PC of Treasury for a pre-audit, and by the General PC of Inspection and Control as a post-audit (for further information see figure 2-1).

Figure 2-1: Budget Control in Local Goverment

Gareeb (2005:6)

2-12-4 The final account of state

The final accounts preparation is started when the General PC of Treasury asked all governmental bodies and the Financial Services Controls of PCMs to prepare their sub-final accounts before the end of fiscal year according to its instructions. These accounts would be included the analytical reports of all the financial transactions that are made during the present year (Gareeb, 2005).

Before the end of fiscal year all PCMs and government bodies have to send their final accounts individually to the General PC of Treasury for preparing the final account of state. The General PC of Treasury submits the final account to the General PC of

Inspection and Control for auditing and making its report. This report would be submitted to the GPC, General PC and General PC of Treasury (General People's Congress, 2008).

In this regard (The General PC of inspection and control, 2008) concluded that the final accounts of state consist of the following items:

- Assets such as cash, advances, and outstanding accounts, and the accounts of administrative budget, international investments.
- Liabilities and credits such as general reserve, development accounts, loans, deposits accounts, other accounts.

2-13 Relationship between the LPCMs and Some Governmental Bodies

LPCMs have a relationship with some governmental bodies which play different roles for coordinating and controlling the public revenue and expenditure of LPCMs.

2-13-1 The General PC

The General PC determines objectives and policies of state for estimating revenues and expenditures. The General PC has authority to modify the total amounts of annual and development budgets for the PCMs and governmental bodies according to proposals from the General PC of Treasury. The General PC also controls the procedures of contracts with private organisations (El Sihairi, 2006).

2-13-2 The General PC of Treasury

The General PC of Treasury controls and monitors the total public revenues and expenditures. The General PC of Treasury also supervises the budget preparation and implementation in PCMs and governmental bodies. It issues instructions to the Financial Services Controls of PCMs regarding the annual budget implementation which are sent to financial controllers who play the main role in the budget preparation and implementation (General People's Congress, 2001). The General PC of Treasury is also responsible for performance evaluation of all governmental bodies and PCMs and all the organisations which are financed by public funds (Al-Badre, 2007).

2-13-3 The Financial Services Controls of PCMs

The Financial Services Controls of PCMs connect The General PC of Treasury with PCMs and governmental bodies regarding the instructions for budget preparation and implementation. In addition it is independent body from LPCMs (Al-Badre, 2007).

2-13-4 The General PC of Planning

The General PC of Planning prepares and control the development programmes for social and economic plans which are proposed by all LPCMs, government bodies and independent public organisation. The General PC of Planning is responsible for preparing, controlling, implementation and performance evaluation regarding all development plans of LPCMs and other public organisations (The General PC of Planning, 2008).

2-13-5 The General PC of Inspection and Control

The General PC of Inspection and Control is the highest government body in Libya for controlling and performance evaluation of all government bodies, PCMs and all the organisations which are financed by public funds. The General PC of Inspection and Control applies external controls and is post-audit based as it is an independent body and deals with the GPC directly (General People's Congress, 2001).

2-14 Summary

This chapter provided an overview of the Libyan political, economic and social system as it relates to the accounting profession and its related law and regulations. Libya after the discovery of oil in the 1960s had changed from a limited resourced country to a resource rich country. Oil and natural gas revenues have had an important influence on the development and improvement in different Libyan sectors. The accounting profession in Libya is oriented towards the accounting environments and private sectors of the UK and the USA. This was due to the high impact that these two countries have had on accounting in the accounting education sector and oil companies. With regard to the economic factors, the high oil revenues have enabled the government to provide its citizens with the basic infrastructures of health care, education and social equality.

The current Libyan laws and regulations in relation to accounting practices were issued a number of years ago and need to be reviewed and updated to reflect the recent national economic changes which have occurred since the final lifting of UN sanctions. However, management accounting practices are still based on directions from government bodies regarding the budget preparation and implementation, budgetary control.

Chapter Three

Chapter Three
Management Accounting Techniques

3-1 Introduction

The practice of management accounting techniques plays a significant role across various organisations. Through a discussion of the role of management accounting this chapter will attempt to provide an understanding of issues that relate to the practices of management accounting techniques employed in the public sector. There are several subsections in this chapter which discuss planning and budgeting, strategic planning, the annual budget, budget preparation, capital budget, budgetary control, measurement and reporting, performance evaluation and accountability. The aim of this chapter also is to present current and previous studies of management accounting techniques in the developing countries of the public sector in general and local government setting in particular. Insight will also be gained on the practice of management accounting techniques on operational functions of the local level. The resultant key findings aim to benefit current research and offer an insight into the dynamics of management accounting, the process of change over time, current practices and significant impacts for the future in the local government setting. The approach to the literature reviews is to identify the range of management accounting techniques available. The review then covers research in developing countries highlighting the degree of usage of these techniques.

3-2 The role of Management Accounting

Accounting literature makes it clear that accounting can be divided into two branches: Management Accounting and Financial Accounting where differences exist between Financial Accounting and Management Accounting (Atkinson *et al.*, 2001; Atrill and McLaney, 2004). International Federation of Accountants (IFAC) (2005) state that the main point for differentiation is that Financial Accounting exists to provide information to external parties such as investors, tax authorities and creditors whereas management accounting is focussed on internal management in order to provide support for routine practices and operational decisions as well as those decisions that can be seen as strategic in nature.

The Canadian Institute of Chartered Accountants (CICA) (2007) made it clear that accounting must consist of substantially more than simply financial statements that present information, and must be able to provide a basis for many of the decisions taken by management. This is illustrated by the summary of the characteristics of financial accounting and management accounting as presented in Table 3-1 below.

Table 3-1: Financial Versus Management Accounting

Financial Accounting	Management Accounting
Oriented towards external users of the organisation.	Oriented to internal users of the organisation.
Reports governed by prescribed principles.	Reports and content are flexible.
Based on the needs of external users.	Based on the needs of management.
There is need for uniformity in reporting because of the varied needs of users.	Management can specify the type and content of information needed.
Looks at all financial aspects of the local government as a whole in order to come to decisions.	Typically addresses certain financial and management aspects of the local government for decision making.
Focuses on financial position, annual results and the ability to generate cash.	Focuses on such issues as the prices that should be charged, the product lines that should be offered and the profitability of specific products.
Transaction and event based.	Includes transactions and events, future plans and any other required data.
Unified by the basic equation Assets -Liabilities = Capital.	Based on three principles: full, differential, and responsibility costing.
Mandatory.	Optional.

Source: (CICA) (2007)

The important role that is played by management accounting systems in providing information to facilitate planning and control within organisations as well as the effect it has upon the management executive when they are undertaking decision making and evaluation of organisational performance across numerous sectors which has been described in academic studies and by professional organisations. Ahmad (2004) concluded that Management accounting was defined by the American Accounting Association (AAA) as

> *"the application of appropriate techniques and concepts in processing historical and projected economic data of an entity to assist management in establishing plans for reasonable economic objectives and in the making of rational decisions with a view towards these objectives".*

The Chartered Institute of Management Accountants (CIMA) (2000:3) called it,

> *"the identification, generation, presentation, interpretation and use of information relevant to formulating business strategy; planning and controlling activities; decision-making; efficient resources usage; performance improvement and value enhancement; safeguarding tangible and intangible assets; corporate governance and internal control".*

Ahmad (2004:6-7) summarized the role of management accounting in five points as follows:

> "1. *The basic objective of management accounting is to assist the management to make it more efficient.*
> 2. *Management accounting makes use of various accounting and statistical measures to represent the accounting and other information in the most suitable form for the convenience of management.*
> 3. *Under management accounting the accounting information are further analysed for better understanding and decision-making.*
> 4. *Management accounting helps the management in envisaging and formulating realistic plans. Coordination is also effected with the help of this technique.*
> 5. *Management accounting is not only concerned with plan formulation and decision-making but also deals with measuring the execution of the plans so as to know whether or not the desired efficiency has been achieved".*

In addition, Drury (2006) stresses the fact that management accounting is responsible for the appropriate provision of information to enable decision-making, planning, control and performance evaluation. Additionally management accounting is able to provide information that is accurate and appropriate in order to facilitate decisions relating to planning and control is also of great importance and can aid executives in their efforts to improve an organisation's profitability (Jaruga and Ho, 2002). Hussain (2005) highlights that management can gather useful information from management accounting which enables them to make more effective decisions and plan and control more efficiently. It can therefore be concluded that management accounting is an instrument that can help the management of any organisation to gather the information that is needed and so can be seen as a branch of accounting that is a vital tool for the administration of organizations (Weetman, 2003).

Ernst *et al.*, (2003:1) state:

> *"Management accounting is increasingly seen as a business partner, focusing more and more on key strategic issues, well beyond the boundary of traditional finance".*

In relation to this role, Atkinson *et al.*, (2007: 3) reiterated the usefulness to management of non-financial information as well as financial information, while indicated that the primary function of management accounting is to:

> *"provide information, both financial and non-financial, to managers and employees inside an organization. Management accounting information is tailored to the specific needs of each decision-maker and is rarely distributed outside the organization".*

Therefore, management accounting can play the major role in providing information so that management is able to function more efficiently. Patankar (2008: 6) identifies that:

> *''Management accounting deals with providing information to managers for their use in planning, decision making, performance evaluation, control...... Management accounting contains reports prepared to fulfill the needs of managements''.*

Hussain and Gunasekaran (2002) also considered this aspect of management accounting when they stated that it played an increasing role, particularly in the services sector, in the measurement of the emergence of non-financial performance.

From the various definitions of management accounting for the purpose of this study, management accounting techniques will be defined utilising Patankar (2008) definition to fulfil the needs of management. The advantage of using management accounting techniques in the Libyan context is the international acceptance of these techniques in the global operations of various organisational sectors, types and segments, and therefore, LPCMs need to use these techniques to provide detailed and accurate information to management at appropriate time to ensure efficiency and effectiveness of their performance in the business environment where foreign multinational organisations invest in Libyan local economy.

3-3 The difference between public and private sectors

The differences between public and private sectors have been examined at some length in the literature dealing with politics, economics and public administration, for example Boyne (2002) points out that there are differences between both public and private organisations, which included the organisational environments, goals, structures and managerial values. In this regard, Halvorsen *et al.*, (2005) concluded the main differences between the public and private sector in the following table 3-2 as seen below.

Table 3-2: The difference between public and private sectors

Halvorsen, et al. (2005: 26-29)

There has been an increased interest in the public sector around the globe in relation to the management accounting techniques currently in use by many profit organisations (Hoque and Moll, 2001; Pallot, 2001; Carlin, 2003; Christiaens, 2004).

3-4 Management Accounting in the Public Sector

According to Lambert and Lapsley (2006) there have been a number of developments in management accounting techniques over the last twenty years. All organisations in the public sector will rely on accounting techniques in order to achieve their targets. Management accounting practices are used by both the private and the public sectors. Therefore, the local government as part of the public sector also uses management accounting practices in order to exercise control and for budget preparation, although it was indicated by some authors that in local government not all management accounting practices are used. According to Chan and Xuyun (2009) government organisations use the private sector management accounting techniques. As indicated by Gordon and Miller (cited in Sciulli and Wise, 2004: 5), the development of management accounting is affected by the environment, the organisation, and the styles of management and these have been adopted from the private sector.

3-5 The Planning and budgeting

A number of commentators have questioned the adoption by the public sector of private sector accounting principles (Connolly and Hyndman, 2005). Consequently the main aims and objectives of organisations within both the public and private sector are most often long-term in nature whereas what is needed is that plans that cover a range of time scales, long-term, medium-term and short term. Within local public administration, medium and even long-term planning would be permanently established (Hogye and McFerren, 2002).

Mikesell (2007) defined *budgeting* as the process of planning, adopting, executing, monitoring, and auditing the fiscal program for the government for one or more future years. Pilkington and Crowther (2007) suggest that there should be some form of budgeting process in relation to planning and control since this seems to impact positively on success in the future. "*Every budget is a plan but not every plan is a budget*" (Fubara and Agundu, 2003: 49). In this respect, Anthony and Young (2002:19-20) describe a budget as follows:

> *"a budget is a plan expressed in quantitative, usually monetary terms. It covers a specified period, usually a year... during the budget preparation phase made in program terms are converted into responsibility terms".*

Kloot (2001) stated that the plans contributed in a limited way to enhancing the accountability of local government entities to the general public and Australian government, due to lack of appropriate performance measures and indicators. According to Greiling (2006) the annual planning indicators also include some information on the planned efficiency. In this regard, Jones and Pendlebury (2000) contend that management accounting is closely involved with aspects of planning.

3-5-1 Strategic Planning

According to Mwita (2002) determining an organisation's objectives must be the beginning of the primary strategic planning process. Mullins (2007) indicates that the strategic plan includes short-term and medium-term objectives and serves as a guide to the local government authority when undertaking the budgeting and management of the local municipal area (Mullins, 2007; Mwita, 2002). This strategic plan supplants all other municipal plans, assists in future plan creation, and is a monitoring system for new and existing plan's content and performance relevant to the management requirements of each specific organisation (Mullins, 2007; Mwita, 2002). Strong strategic planning ensures the priorities of regional and national levels are reflected in development plans (Mullins, 2007).

According to Linton (2005) parallel implementation plans often exist alongside strategic plans and these give an outline of the various elements that are required, and can include the responsibilities, timelines, resource requirements and organisational or operational changes required if the strategic plan initiatives are to be delivered.

According to Elbanna (2010) there is not enough literature about current accounting practices in Middle Eastern Arabic countries and there has been a recent move in the United Arab Emirates (UAE) towards strategic planning for the public sector. As indicated in Chapter 2, Section 2-6, all Libyan governmental units prepare a formal Five Year Development Plan for Development and Programme of Economic and Social Transformation. Therefore, this study examines the practices of LPCMs in relation to such development plans.

3-5-2 The Annual Budget

Local government in any country should provide a structure for choosing policies and for identifying the best use of government resources for provision of government services, and the budget process should provide a structure for ensuring that resources are allocated to control and performance evaluation (Mikesell, 2007). The annual budget requires estimated revenues for the next financial year to provide resources in order to establish spending plans. It has been necessary that revenue estimates should be accurate to stay away from revenue deficits or excessively large revenue surpluses during the financial year. The budget is focused on controlling expenditures so that managers spend funds according to the government regulations (Mikesell, 2007). Therefore, the financial department in any local government agency aims to monitor accounting reports to ensure that allocations are not overspent and to monitor spending of execution expenditure activities that have been set and approved according to the specific statutory government regulation (Thurmaier, 2007). In Libya, Al-Badre (2007) states that there are a number of legislative requirements which control the preparation and development of national and local government budgets.

In this regard, Mikesell (2007) indicated that there are a number of basic principles for the design of a local budget system. These principles are:

- *''The budget process is comprehensive, including all fiscal entities associated with or connected to the government, and there are no extra budgetary funds to interfere with fiscal discipline, transparency, accountability, and the struggle against corruption.*
- *The budget minimizes the use of earmarked funds that reduce the capacity to allocate resources to areas of highest priority.*
- *The budget is intended to be an operations guide and to be executed as it was enacted.*
- *The budget process is an annual one, to maintain control, but is adopted in a multiyear financial framework to facilitate planning.*
- *The budget is based on a realistic forecast of revenues and of the operating environment.*
- *The budget serves as a statement of local policy.*
- *Expenditures in the budget are classified according to the administrative unit that is legally responsible for the funds and according to the basic purpose (or program) of the spending.*
- *The budget is provided in an intelligible format as a communication device with the public, both while it is considered and after it has been adopted.*
- *The budget process is focused on performance results, not only on inputs purchased by the government.*

- *The budget process incorporates incentives for lawmakers to respond to citizen demands for services and for agencies to economize on use of resources".*
(Mikesell, 2007: 27-28)

Whatever the ultimate approach to budget preparation that an organisation adopts, it is usually the case that the central finance department will make the most substantial contribution where significant grants have been provided by central government. In the case of Libya this can be observed by the Minster of Treasury's control and influence of the central government contribution to LPCMs grants (General People's Congress, 2008).

3-5-2-1 Budget Preparation

As mentioned before, the budget is a detailed quantitative financial plan that will usually be in place for one year and which results from discussions between the representatives of varying levels of responsibility and these negotiations will estimate the level of expenditure and of the resources that will be necessary to meet this expenditure. Jorge (2007) stated that the Portuguese local governments' budget is prepared and presented by the executive committee to the local council, to be discussed, approved and published at an appropriate time. Commonly, local governments follow the legislative approval and review and the executive preparation stages. The process begins with consideration of needs and resources and preparation of expected expenditure by council committees, especially the budget committee of each local government, who have participated in negotiations from the beginning. These committees discuss budgets of local governments and agencies and they can make proposals to the municipal council regarding changes in the municipal budget. Thereafter, the municipal council will discuss these proposals in committees and present results to the government or council for preparation of the municipal budget (Mullins, 2007). There are several stages usually followed during budget preparation within the public sector. Jones and Pendlebury (2000) identified three stages in the preparation of a budget, the first being the stage where estimates are prepared for each individual centre or department within the organisation; the second stage is where any necessary revision to departmental budgets is undertaken and the third and final stage is the preparation of the overall draft budget for the whole organisation and its submission for final approval to the governing body of the organisation, which will be either an appointed board or an elected council or, where central government is involved, parliament.

Complex procedures are involved in this process and therefore an important issue associated with the preparation of budgets in the public sector is that there should be budget instructions established which the participants must follow. During the preparation of the budget there will be informal negotiations and also bargaining which are vital to allow the process to work where there is no written code (Jones and Pendlebury, 2000). Planned public sector spending tests the budgetary systems of public sector organisations position Jones and Pendlebury (2000) who advise that it is necessary to have a negotiation system to justify the public services priorities to meet public opinion and needs. This process is likely to be difficult when there are reductions in allocations and therefore clear objectives and priorities are necessary in order for there to be a fair allocation process (Jones and Pendlebury, 2000).

In this regard, the current study will investigate budget preparation in LPCMs with analysing issues related to budget preparation such as the basis for budget preparation, the techniques of budget preparation, the responsibility of preparing and implementing the budget and the reason of budget preparation.

Traditional techniques of budgeting include approaches such as line-item budgeting and incremental budgeting as well as other developed approaches, such as programme budgeting and zero-base budgeting. Both traditional and developed approaches have been tested by being applied in practice. These techniques are discussed in turn below.

3-5-2-1-1 Traditional Techniques of Budgeting

3-5-2-1-1-1 Line-Item Budgeting

The line-item budgeting is traditional budgeting technique of appropriating agency budgets by detailed input categories (such as wages, supplies, and travel) and prohibition these agencies from transferring money between those input categories (Robinson, 2007). Shah and Shen (2007) stated that line-item budgeting is a traditional approach that presents expenditures by resources and it focuses on inputs or resources and information which explain how much is spent and how it is spent rather than on what it is spent. The line-item budgeting does not explain the efficiency of resource use, because it has not linked inputs with outputs. The line-item budgeting approach focuses on decision making regarding inputs rather than on program efficiency and effectiveness (Shah and Shen, 2007).

In Eastern European countries it is usual that all local government budgeting uses the technique of line-item budgeting; this takes into account the previous year's expenditure on services or expenditure that has been undertaken to operate necessary institutions only

(Hogye and McFerren, 2002). Jones and Pendlebury (2000) state where the line-item budgeting approach is used, the estimates of income and expenditure for the current year are seen as being the starting point for the budget for the next year. This introduces a fundamental weakness into the budgeting system since this approach fails to take into consideration whether a particular item is still needed or whether the level of expenditure currently incurred can be seen as reasonable.

3-5-2-1-1-2 Traditional incremental budgeting technique

Incremental budgeting as a traditional technique, takes into account the differences between the budget of the current year and the year preceding. The reasons for using incremental budgeting have been summarised by Jones and Pendlebury (2000) whom indicate that in the first place activities that have taken place in the previous year will be important for meeting the goals of the organisations and it will be necessary for them to continue across a number of years. It would, therefore, seem sensible to concentrate on the changes from the previous year since these may be the total of what is controllable. Secondly, t is difficult to analyse all activities and therefore only discussion concentrating on the relatively small changes that the budgetary process proposes, will work. The view has been put forward that help with calculations such as that given by incremental budgeting are necessary in the light of the decision maker's limited knowledge and information and possibly limited cognitive ability. Thirdly incremental budgeting decreases the area that can be the subject of dispute and so conflict is reduced and this is consistent with the principles of conservatism. If the focus is put on incremental changes then any arguments about budgetary allocations are likely to involve only small amounts and the substantially greater part of the annual budget allocation will not be disputed.

There are limits to the degree of control that the incremental approach can exert over efficiency. For instance, there is no mechanism that is able to assess the benefits that have accrued from existing expenditures which means that there is no basis for giving direction to officials so that they are able to allocate their resources in a more efficient way. Nemec (2008) has indicated that in municipal authorities where the emphasis has been on incremental budgeting that there have been weak accounting functions and leads to concerns about the decision making processes for the allocation of funding.

3-5-2-1-2 Developed techniques of budgeting

Where possible, rational approaches to budgeting aim to overcome the limitations that exist with traditional budgeting approaches according to Weetman (2006) in an attempt to deal with output. Two of these rational approaches are Planning Programming Budgeting Systems [PPBS] and Zero-Base Budgeting [ZBB] (Weetman, 2006).

Webber (2007) highlights that there have been significant developments in government budgeting of some developed countries such as UK, France and New Zealand which have taken place in public management and government budgeting systems over the last 40 years. Even though not all initiatives in budgeting have been successful, most have contributed to improve the quality of public management functions. Initiatives have included "output" and "outcome" budgeting, and therefore are starting to be used as part of rational budgeting approaches such as PPBS and ZBB for improving the performance of programs and activities of any organisation.

3-5-2-1-2-1 The Planning Programming Budgeting System [PPBS]

There is increased interest in some countries for adopting PPBS, for instance the Canadian government replaced the traditional approach such as line-item budgeting with a program focused approach application of PPBS according to Joyce (2007).

PPBS has been defined by Weetman (2006: 576) as

> *"an approach that seeks to separate the policy planning aspects of budgeting from the short-term financial planning process. From the overall objectives, the organization moves on to identify the programmes which will achieve those objectives. The costs and benefits of each programme are then identified so that the programmes may be given relative priorities".*

There is no sound basis provided by the traditional budget for "rational" decision making. Unless a relationship is established between expenditure and fundamental objectives, it is difficult to come to any conclusion as to whether the one will lead to the other. PPBS to be precise, or the technique of programme budgeting was developed as a response to the deficiencies that were perceived to exist in the traditional approach to budgeting, (Jones and Pendlebury, 2000).

Kelly and Rivenbark (2003) stated that PPBS was implemented in 1965 throughout the US Federal government. It was designed to be used to allocate resources among programmes. PPBS processes generally consist of three phases (Allen and Tommasi; 2001). The planning stage uses systems analysis in order to establish the objectives as well as identifying possible solutions. During the programming stage a review is made of a range of available options and these are assessed to find the most appropriate solution. Sets of activities are grouped in multi-year programmes, and these are subsequently appraised and comparisons made. Use is then made of cost benefit and cost analysis in order to make a comparison between the various programmes so that decisions can be taken as to which is most likely to achieve the desired objective. At the last stage, these programmes are converted into an annual budget. PPBS has the following features:

- it defines objectives and programmes in order to achieve objectives and identify related solutions,
- it appropriates activity programmes,
- it uses performance indicators in order to measure programme outputs, and
- it uses cost-benefit or cost-effectiveness analysis (Allen and Tommasi, 2001).

When PPB is being considered it is helpful to differentiate between the programme structure part of the system, and programme analysis. Through the programme structure, it is possible to have a framework that links the resources and activities to the objectives. It is important to establish the relationship between ways and means since it often proves to be the case that the resources required for a particular programme are spread across a number of departments. The use of PPBS means that the normal organisational structure is cut across so that all the relevant material can be put together. Programme analysis concerns itself with the analysis of the costs and benefits of each programme in order for it to be possible to make choices Jones and Pendlehury (2000: 78-79).

3-5-2-1-2-1-1 The Development of the PPBS

As has been previously stated, it was as a result of dissatisfaction with traditional approaches to budgeting that programme budgeting began to be used. PPBS was either implemented or used experimentally by a number of state and local government bodies in both the USA and the UK.

Ellwood and Newberry (2007) explained that the UK Treasury undertakes an inclusive spending review biennially, which looks ahead three years, although separate budgets regarding capital expenditure. In this respect the PPBS strategic planning and budgeting system adopted in the mid-1960s. It includes medium term planning for resources and operational budgeting.

Nevertheless, the US federal government had abandoned it by the mid 1970s and a number of other organisations that had introduced it also abandoned it. However, it is still used in some areas. According to Weetman (2006:576)

> *"the technique of PPBS was advocated with enthusiasm in the USA for Government Budgeting in the 1970s, but by the 1980s had disappeared from favour. The reason was that although the system sounds ideal, it is very difficult to administer because government departments are not organized by outcomes, they are organized on an input basis. In the late 1990s the State of Florida began new attempts to use programme budgets, with a focus on performance".*

In French the senior civil servants have explained the reasons of failures, regarding the PPBS. The management of the 1970s aimed to be very rational and technically perfect but it was too top-down without asking the local services, which are responsible for effective implementation (Trosa, 2009).

3-5-2-1-2-1-2 Critique of PPBS

Jones and Pendlebury (2000:85) summarise the advantages of PPBS as listed below:

> *1- "It provides information on the objectives of the organisation.*
> *2- It cuts across conventional lines of responsibility and departmental structures by drawing together the activities that are directed towards a particular objective.*
> *3- It exposes programmes that are overlapping or contradictory in terms of achieving objectives.*
> *4- It concentrates on long-term effects.*

5-It provides information on the impact that existing and alternative programmes will have on objectives and the associated programme costs.
6-It enables resource allocation choices to be made on the basis of benefit/cost relationships".

However, there are some significant problems associated with PPBS which means that it may fail when it is implemented. A fundamental problem with PPBS was that it neglected the political aspects of the decision making process. PPBS required a highly trained administrator to conduct the various analyses and studies, and these skilled individuals were in short supply (Allen and Tommasi, 2001:132).

United Nations Human Settlements Programme, (2007:86) summarised the disadvantages of PPBS as follows:

- "PPBS increasingly complex; more information must be provided
- very analysis and paperwork oriented.
- PPB May intensify conflict because it reveals that if one service is increased another mist be decreased....
-Determination of the budget for current services is somewhat subjective".

Furthermore, there are difficulties relate to critical gaps in the system itself, one of the reasons why it has not been affective and has not been able to provide a major tool for operating and decision making is that it is designed as a system that is fundamentally a macroeconomic, centralised, top-down policy making tool and is used for long-range planning. Dull (2006) citing Phyrr (1973) identifies that there was five crucial gaps in PPBS in government organisations with a key shortcoming of the focus of PPBS on what will be done rather than how the organisation can do it.

3-5-2-1-2-2 Zero-base Budgeting [ZBB]

The concept of ZBB is the process of requiring justifying expenditures from year to year and line by line rather than justifying increases in expenders on a year to year (Mullis, 2009). The ZBB approach requires managers to build budgets from the ground up each year rather than just add a percentage increase to last year's numbers (Jackson *et al.*, 2007).

Coombs and Jenkins (2002) identify that ZBB is a technique that demands that the total cost of every item, in addition to the base increment, in a proposed budget, must be both justified and approved. ZBB requires a re-evaluation of all expenditure and every activity with all activities starting from a base of zero and, in this way; it aims to focus on what a government organisation's basic purposes are as well as seeking to reveal all expenditure.

3-5-2-1-2-2-1 Critique of Zero-base Budgeting

ZBB also allows an effective use of limited resources through taking in to consideration the objectives when preparing efficient plans. Lasher and Sullivan (2004:199-200) concluded that relationship between budgeting and planning is as follows:

- *"Planning* is oriented to the long-term future 5, 10, 20 years. *Budgeting also focuses on the future, but on the near-term the next 1-2 years.*
- *Planning deals with general concepts – the institutions outputs and outcomes, its mission, goals, and objectives. Budgeting deals with specifics – the inputs to produce the outputs and outcomes, organizational units and departments. Specific programs, and resources.*
- *Planning deals with dreams and 'what its'. Budgeting is concerned with current realities – political and economic conditions, availability of funds.*
- *Planning deals with concepts. Budgeting deals with details.*

- *Planning is concerned with vision and leadership. Budgeting is concerned with administration and management*".

In consideration of the advantages and disadvantages of ZBB which have been mentioned by various studies such as Walker (2009) who indicated that the main advantage of ZBB is that managers are required to take in to consideration alternative ways of obtaining the objectives for their activity and they are also required to give explanations for the activities which they are currently undertaking.

Karthikeyan *et al.*, (2008: 80) summarized the important advantages of ZBB as follows:

> *1) "ZBB forces managers to critically examine the activities and projects to increase cost effectiveness.*
> *2) It develops and promotes a professional cost reduction oriented spirit amongst the managers.*
> *3) It places all the projects (existing as well as proposed) in competition.*
> *4) It encourages grassroots participation in the process of budgeting".*

Scarlett and Scarlett (2007) also summarised that ZBB reduced the complacency inherent in the traditional approach while encouraging a questioning approach that focus on the benefits as well as the cost of an activity. Dull (2006) highlights that the increased preparation and communication processes required in the decision making process slows down the budget preparation process and in some organisations causes it to become unwieldy.

Coombs and Jenkins (2002) identified ZBB characteristics as follows:

1- ZBB allocates resources based on priorities.
2- ZBB improves decision making as budgetary allocation is related to objectives.
3- ZBB makes managers plan in advance and protect their budgets; this creates a greater feeling of ownership of those budgets.

Where an attempt is made to apply ZBB in a formal way to a system that is under political control, the implementation of ZBB is almost certain to raise difficulties. Jones and Pendlebury (2000) identify that that the use of a highly formal approach is difficult to implement in an environment which has to respond to political choice and control.

Among the disadvantages of ZBB is the difficulty of implementation. Examining the ZBB approach in practice Holzer (2004) and Jones and Pendlebury (2000) refer to this issue indicated that willingness still exists to accept that ZBB is sound. Evidence suggests that experiments have been made with even more formal approaches to ZBB and attempts to introduce it have been initiated. According to Khan and Hildreth (2003) there are four major problems that can arise from the use of ZBB. It must be taken into consideration that the complexity of the area for which a budget is being drawn up directly affects the number of decisions that will have to be made which means that managers are able to exercise a considerable degree of discretion which in turn means some loss of control by the legislating body. In the second place, at all levels, there will be an increasing amount of expenditure that cannot be controlled. Thirdly, because decisions relating to priorities are substantially political decisions, it is not always easy to know what they are which is supported by Dull (2006). Lastly, ZBB is a system which presents difficulties when it comes to the incorporation of various grant packages.

Karthikeyan *et al.*, (2008) concluded the disadvantages of ZBB in the following points:

1) ZBB requires large amounts of additional paper work.
2) Is a time intensive process.
3) ZBB is not appropriate for big and growing organisations.

The disadvantages associated with ZBB suggest that it can be used in small organisations, declining organisations and staff units (Karthikeyan *et al.*, 2008).

Therefore, this study aims to investigate the current practices of budget preparation in LPCMs and the bases for budget preparation in these LPCMs.

3-5-3 Capital Budget

Most organisations in the public sector differentiate clearly between those items that are a part of their revenue or are current and those that are of a capital nature. The approach which uses a period of benefit as a measure allows a distinction to be made between revenue and capital expenditure. This distinction recognises that the benefits that result from revenue expenditure tend to be confined to the year in which the expenditure is made, while those that flow from capital expenditure extend beyond the year in which payment was made (Jones and Pendlebury, 2000).

The argument has been made that capital expenditure planning is of critical importance for all public sector organisations if they are to achieve their aims. In this regard, Jones and Pendlebury (2000) the planning of capital expenditure requirements of a public sector organisation are considered for achieving the fundamental aims and objectives of an organisation. In this regard all capital programmes may not be undertaken because of a limitation of resources.

The Chartered Institute of Public Finance and Accountancy *(Financial Information Services, vol. 4, chapter* 7 cited in *Jones and Pendlebury, 2000: 71)* has identified the objectives of capital programmes as the overall plan for the authority which defines it priority activities while assessing the available capital resources to meet the required service provision and revenue consequences of proposed service provision developments.

According to Wong (2005) the capital budget in the Chinese government is formulated separately from the recurrent one with key decisions made by the National Development Reform Commission. Since capital budgets may in some instances cover only one year ahead but in others many years, they are able to represent medium and long -term plans (Jones and Pendlebury, 2000).

3-6 Budgetary Control

As long ago as 1950, a number of attempts were made to bring budgetary controls into line with the organisational structure of the service involved, such as individual hospitals, various departments and functions and directorates; all these at some point were the focus for information about budgetary control (Robson, 2007). Budgetary control is there to ensure that the actual expenditure is in line with the amounts that are budgeted for and that the objectives and levels of activity, as stated in the budget, are achieved (Jones and Pendlebury, 2000). There is a requirement on budgetary control for accounts to be set up for the collection of data on inputs and outputs (Jones and Pendlebury, 2000). The three categories of responsibility centres explained by Jones and Pendlebury, (2000) these centres are: expense centres, profit centres and investment centres.

An expense centre exists in a situation where the expenses of a responsibility centre have been measured but not the monetary value of the output. This is frequently the situation with public sector organisations where, although the outputs exist, it is not possible to measure them or else they can be measured in physical terms but not in monetary ones (Jones and Pendlebury, 2000).

An investment centre exists when the profit and the capital found in a responsibility centre are measured. Where there is an investment centre the profit may be related to the capital that has been invested to produce a rate of return (Jones and Pendlebury, 2000).

A responsibility centre is where the actual expenditure throughout the budget year is collected and measured. From this expenditure, reports are prepared and sent regularly to all levels of management, comparing the actual position with the budgeted position. If the budgetary control system is to work correctly, in that time the information must be relevant and timely (Jones and Pendlebury, 2000).

It is important that budgetary control information in public organisations should provide relevant, detail and accurate information relating to their performance to budget holders, this information needs to be up to date and accurate, delivered on time and to distinguish between those expenses that are controllable and those that are only partly controllable (Jones and Pendlebury, 2000). Budgetary control information should be clear and integrated, what integration means is that every report intended for lower-level managers should be related to those intended to be given to personnel at a higher level (Anthony and Young, 2002). In addition, budgetary control information is included within the reports sent to managers monthly, quarterly of expenditure set against budget and year-to-date and receive reports by having access to on-line reports (Kloot and Martin, 2000; Anthony and Young, 2002).

In determining the style of budgetary control report to any organisation one should have regard to the costs and benefits of reporting. The marginal benefits of additional reporting start to decline as the volume of reporting and the associated cost of reporting. The design of a budgetary control report depends very much on the inclination of users and the determined reporting requirements of the agency (Scarlett, 2009). Adjustments should be made for any known factors that might affect the pattern. It should be possible to make valid comparisons between budget figures and actual achievement based on budgetary reports, and the budgetary report should reflect the same time scale and features for both the estimated and the actual figures (Jones and Pendlebury, 2000).

One criterion of crucial importance in a budgetary report is that it should distinguish between those items that are controllable and those that are not. It follows, therefore, that budgetary reports should deal with the expenses that the budget holder can control (Jones and Pendlebury, 2000). Budgetary control issues in LPCMs are one of the important issues will be analysed in the current study, focusing on the extent that this system in utilized by LPCMs to gather information to support their service delivery to be effective and efficient provision.

3-7 Measurement and Reporting

Flynn (2007) indicates that a vital part of public accountability is the measurement of efficiency and to ensure confidence in agency by the public the financial reporting of the agency should be independent validated. The total process should contain the stages of measuring, reporting and evaluation. In the course of the operation of an organisation, managers should supervise and help the accounting staff to keep accurate records of the inputs and outputs that occur. This accounting information, together with other information should then be summarised, analysed and reported to those who have a responsibility to be aware of what is happening within the organisation as well as those who have the responsibility to see that agreed levels of performance are met (Flynn, 2007). Such a report makes it possible to make a comparison between planned outputs and inputs with the results gained from the monitoring of what has actually been achieved (Anthony and Young (2002).

3-7-1 Performance Evaluation

In the last decade, performance measurement has emerged as the most important public sector reform of many years, surpassing even management by objectives, total quality management, zero-based budgeting, and program planning and budgeting (Aristovnik and Seljak, 2009). Budgeting reforms were introduced in several countries for supporting and enhancing a wider focus on performance management (Webber, 2007).

Several researchers have observed that some performance measurements techniques imposed by central government have influenced behaviours or were used to influence and control behaviours in local government (Alam and Pacher, 2000; Bowerman *et al.*, 2001; Ball *et al.*, 2002; Young, 2005). Young (2005) indicated that there is relationship between the authorities and central government, whereby a local authority attempts to achieve demanding targets agreed with central government in order to secure additional financial resources and autonomy.

Shah and Shen (2007) specify that the budget of any organisation can be included performance indicators in the budget's instructions to demonstrate desirable performance levels. Boyne *et al.*, (2002) stated that there are essential performance indicators, such as indicators for equity, public participation and *Value For Money* (VFM), were lacking. Moreover, there are indication that various performance measurements imposed by central government and other external agencies have contributed to improvement in local government performance (Higgins *et al.*, 2004). The best value performance measures in local government in the UK were imposed by central government without the involvement of the stakeholders (Ball *et al.*, 2002).

Pollitt (2003) demonstrated diversity and changes in the roles played by VFM auditors in New Zealand and five European countries (Finland, France, the Netherlands, Sweden, and the UK). Pollitt (2003) observed that state audit institutions in the five European countries played at least four roles in VFM audits with each country emphasizing one or two of the roles. The roles were the production of reports for enhancing the accountability of public bodies, the provision of advice for management improvement, initiation and promotion of best management practice, and making judgments on the legality and appropriateness of decisions and actions of public bodies.

Other factors that are associated with the reduced effectiveness of performance management in local government entities include lack of capacity in local government staff and politicians, lack of ability to understand performance indicators, and lack of adequate performance indicators (Sanderson, 2001; Kloot and Martin, 2000; Boyne, 2002; Bogt, 2004). Sanderson (2001) having analysed performance management in UK local government, proposed supportive training for both staff and elected members on development and usage of performance measurements and evaluation. In a survey of senior politicians in Dutch municipalities, Bogt (2004) noted that participants used marginally quantitative performance information contained in planning and control documents while politicians depended more on verbal information provided by managers during consultations and formal meetings.

The most recent initiative of performance evaluation in UK is the Comprehensive Performance Assessment [CPA]. In this initiative the shared performance of authorities are evaluated rather than individual services under the Best Value Regime [BVR] (Seal and Ball, 2008).

Giroux *et al.* (2002) in a study ordered by the government in the UK identified the preparation and publication of performance measures by UK local government and in the USA. UK Central Government requires measures both financial and non-financial that cover a range of services and specifies from where they should be drawn. More recently there are changes of performance measurements for English Local Government between 2002 and 2008 to improve public services, where the most recent initiative of performance evaluation is CPA. Therefore, this initiative is concerned with the performance evaluation of all authorities rather than individual services under BVR, and has an important impact on the performance management of English Local Government (Audit Commission, 2009).

3-7-1-1 Efficiency and Effectiveness

Effectiveness and efficiency concepts were explained by several authors where, Richard, (2008) defined the effectiveness as degree to which the organisations realise their goals and the effectiveness evaluates the extent to which multiple goals. Anthony and Young (2002), and Jones and Pendlebury (2000) explain that the efficiency is the resources used to produce a unit of output, the efficiency can be measured as the ratio of inputs to outputs. Curristine, *et al.*, (2007) stated that there were different ways suggested to improve the efficiency such as increasing the scale of operations may improve efficiency. The performance information also improves transparency by providing more information to parliaments and to the public, and this information has the important role to improve public management and efficiency. There is some evidence that a reduction of input controls combined with steering for results, financial incentives and competition could lead to increased efficiency.

Effectiveness as a concept that lacks precision and therefore it is not easy to measure. The relationship between a centre's output and its objectives constitutes effectiveness and the more its outputs contribute to its objectives, the more effective a centre will be. It is, therefore, only concerned with outputs, but because it is difficult to measure output as well as any success in meeting objectives, it is often difficult to obtain meaningful measurements of effectiveness and so effectiveness is usually expressed in qualitative, judgemental terms (Anthony and Young, 2002; Jones and Pendlebury, 2000; Lane, 2000).

On the other hand Jones and Pendlebury (2000) stated that the "Economy" concept is concerned with input only and can also only be seen as a relative measure with limited usefulness on its own. There is no point in knowing something is as cheap as it could possibly have been if it is not able to satisfy the organisation's objectives. In a similar way effectiveness on its own has a limited use since knowing that an organisation has achieved its objectives without having any knowledge of what this cost, is of no real value since it is possible to achieve almost any objective where the resources are unlimited. Real achievement lies in achieving the objectives at a minimal cost.

However, efficiency relates to both inputs and outputs and therefore when a system is in equilibrium it should be able to stand on its own. Jones and Pendlebury (2000) conclude that there is two factors in the public sector make it difficult to measure performance:

1. In the case of outputs being measured in terms of money, the quality of the ratio depends upon the capacity of the output measures to reflect consumer preference. Market failure is a problem that typically affects the provision of services in the public sector. In this way operating inefficiencies can be passed onto the public who will have no choice but to pay the higher price.
2. Where it is not possible to measure outputs in monetary terms it becomes necessary to turn to efficiency ratios where outputs are measured in physical units. The problem here is that the ratio can no longer be considered to be a universal standard since the physical output measure is only a surrogate for the ultimate output and therefore the ratio can no longer represent a universal standard since the physical output measure is only a surrogate for the ultimate output (Jones and Pendlebury, 2000).

Hyndman and Eden (2002) refer to flaws in the reporting of the effectiveness and efficiency as a credible indicator of performance monitoring measures and the use of quality targets as the main basis for measuring effectiveness over a set time period. However, in comparison with the other private and non-profit sectors, it was found that the reports from the executive agencies had a more robust range of improvements as a result of applying measures of performance in the context of efficiency and effectiveness.

The aim of this study is to investigate the effectiveness of current management accounting techniques in LPCMs. Through the investigation of what techniques are currently be used the research will address whether these techniques are fit for purpose or does change need to occur to enable efficiency and effectiveness to be measured.

3-7-1-2 Performance Reports

Two general types of output are covered by performance reports these being economic performance and management performance. The economic performance report can be aimed to focus on the surplus or deficit of separate programmes, a profit centre, or the whole organisation. A management performance report will focus on the manager of a responsibility centre and is called a control report (Anthony and Young, 2002). Furthermore, Anthony and Young (2002) indicated that there are three essential characteristics must be presented for a good management performance report, which are

1. They should be related to personal responsibility. Responsibility accounting is a system that classifies the cost allocated to each responsibility centre in relation to whether they are controllable or uncontrollable.
2. Actual performance is compared with the best standard available and a report contains information about actual performance. If a report is to be useful it must compare the actual performance against a standard and the three types of standard are budget, historical and external. Where it has been carefully prepared, the best standard to use is a budget which takes into account the conditions that it is thought will exist in the budget year; the items of revenue and expense show what the monetary effects of these conditions will be. Some organisations use historical standard in order to compare current performance with past performance.

3. There is a focus on significant information. One of the problems when reports are designed is deciding which the appropriate information to give to management and managers should request only that information that they need.

The performance reports are not only included the financial information that management has to provide, but also the non-financial information. For this reason it has been stated by Debreceny and Bowen (2005) that the relevant information from database accounting systems. Many organisations are required to submit financial reports to different users such as regulators, investors and other stakeholders with information coming from different sources. Financial and non-financial information has become increasingly more important to ensure an effectiveness and efficiency of performance.

It is very important to determine performance indicators and to be aware of their limitations. Output budgets generally contain many financial and non-financial indicators, often indicators of details cannot be influenced by local governments (Bogt, 2008a). The non-financial measures have information content while the financial measures for both future costs and future revenues. Information content and timescales of non-financial measures, in particular customer satisfaction measures, can be different than for future financial measures (Wiersma, 2008).

This study will examine of the extent of use of the performance measurement within LPCMs, where the performance indicators and the performance of measurement techniques are investigated, as well an examination the non-financial reports in LPCMs.

3-8 Accountability

While accountability may be difficult to define there is a consensus that it involves a rendering of an account and therefore the provision of information. Underpinning the concept of accountability is the notion that one person is responsible to another, and is obliged to render an account of their decisions and actions to another party (Kluvers and Tippett, 2010). Mulgan (2000) extended the dimensions of accountability in the public sector to include 'control', responsiveness and dialogue. The notions of responsiveness and dialogue are also used by Roberts (2002). Koppell (2005) too introduced notions of responsiveness and control. The control aspect of accountability in the public sector context is concerned with the establishment of institutional mechanisms of accountability, such as constitution and legislatures that are amenable to public control (Mulgan, 2000).

In addition, Barton (2006) defined the accountability as an obligation to present an account of and answer for the execution of responsibilities to those who entrusted those responsibilities. Accountability is thus established when an agent accepts resources and responsibilities entrusted by the principal. Steccolini (2004) concluded that the use of annual reports was a medium of accountability in local government entities in Italy, observing that annual reports represented a poor means of discharging accountability to both internal and external users. This was because the reports were mainly received by internal users, such as councillors and administrators, rather than the citizens (Steccolini, 2004). Furthermore, the annual reports lacked information relevant to potential users, such as performance in service delivery. Jones and Pendlebury (2004) assert that published annual audited accounts of local government entities do not discharge accountability to the stakeholders, but simply provide assurances of the underlying accounting records. The improvements in service performance indicators and descriptors may enhance the usefulness of annual reports in accountability and governance (Ryan *et* *al.*, 2002; Steccolini, 2004). The annual reports of local government facilitate only limited aspects of accountability relationships, especially financial and managerial accountabilities as well as accountability to auditors (Taylor and Rosair, 2000).

Goddard's (2005a, 2005b) stated that budgeting was the most important accounting practice to accountability and governance, noting that it facilitated the different typologies of accountability, namely political, organisational, member-manager, structural, public, and professional accountability. Goddard (2005a) proposed further that accountability perceptions held by participants, together with trust and power, influenced budgetary practices in the local governments.

3-9 Contingency Model in Management Accounting Research

Lüder (2001) *Contingency Model* according to Christensen and Parker (2010) aims to assess the conduciveness of environmental factors to governmental accounting innovations. Lüder (2001) believes that, regardless future contributions that might be important for research in comparative governmental accounting, Nevertheless, Lüder (2001: 2) himself recognises that his initial model was based on a centralise government budget and accounting systems Speyer (School of Administrative Sciences) study. Ouda (2010) identifies that the *Contingency model* comprises of four contextual variables: incentive, the socio-cultural characteristics of the country, the political and structure characteristics and implementation barriers.

Ouda (2010) also explains that Lüder (2001) attempts to specify the features of the current political-administrative environment in a country and to identify their probable influences particularly on the outcome of government accounting reform processes.

Furthermore, Saleh (2007) identified that although previous studies underpinning the application of the contingency models were based on a study of developed economies that this model offers a starting point for assessing fundamental changes to accounting systems in less developed economies.

Compared to the contingency model analysis for central level, the likelihood for introducing controlling and management accounting seemed to be potentially greater at local level. This happened because the influence of societal structural variables is more pronounced due to the much greater involvement and closeness of the public at the local level, Vela Bargues (1996). In this regard, Waweru *et al.*, (2004) a contingency theory framework, commonly used to contribute to understanding of the adoption of changes in management accounting systems in a developing country context.

The Contingency Model proved to be a suitable basis for analysis of specific factors of influence on the introduction of controlling and management accounting at local level. Indeed, it seemed to have provided sufficient explanation of innovations and concepts of management accounting, Vela Bargues (1996). Caba-Perez *et al.*, (2009) identify that in developing countries such as Paraguay, Chile and Argentina that reform and its effectiveness is dependent on the contextual environment of how and when the reform is undertaken. Alawattage (2007) Contingency theory needs to conceptualise, measure, and evaluate political uncertainties identified in management accounting studies of organisations in less developed countries. However, this should recognise that this is partly contingent on poverty, as yet unstudied contingency factors.

Godfrey *et al.*, (2001) tested the contingency model on the application to government accounting in Albania, a former communist country, converted to democracy and experiencing profound economic and political changes, including in government accounting. They not only could observe that the Albanian government level of organizational innovativeness was marginally positive, but also were able to identify the current position of the innovations process: it was in the clarifying stage of the implementation phase, which the authors consider a critical stage. In this, the new government accounting techniques has still little meaning within the government system.

> " *Through social interaction, administrative actors in particular, but also political and social actors as stakeholders of the government organization, gradually gain a common understanding of the new system. This social construction is important in allaying uncertainties and answering questions.* "
>
> (Godfrey *et al.*, 2001: 295)

The Contingency Model is not very explicit about the decision processes through which innovations are adopted (Ouda, 2010). The Financial Management Reform Model tries to fill this gap, considering a cluster of instrumental variables concerning the "implementation strategy", which embraces process variables, whilst the decision process underlying the reform is still not considered. This was done, as we presented, by Godfrey *et al.*, (2001), where a module aimed at characterising the innovation decision process complements the contingency approach.

The Financial Management Reform Model has the great value of considering a number of critical issues and suggestions have been made by several authors as result of applications of (previous versions of) the Contingency Model; on the other hand, it takes into account new aspects developed from Professor Lüder's research and experience (Jorge, 2003).

The basic premise of contingency theory is that there is no one best way of managing organizations that is optimal for all situations. Contingency theorists argue that different strategies and practices should be considered for different environmental contexts in order to find an optimal fit (Choi and Cameron, 2005).

In line with the above this study will examine the current practices of management accounting techniques in use by LPCMs and explore of selected contingent factors within the new environmental changes in Libya. Therefore, this study is based on the contingency model that management accounting is subject to the business environment within which organisations operate. As the business environment in the Libyan market has changed since the early 1990s, this study will examine whether the current practices of management accounting of LPCMs have changed too.

3-10 Management Accounting Practices and NPM in Developing Countries

In this section a review of the adoption of New Public Management [NPM] and current practices of management accounting techniques in a number of developing countries is outlined. The focus of this study would assess the practices in the public sector and particularly local government of these countries.

Over the last two decades, public management has undergone substantial changes in both developed and developing countries (Sarker, 2006). As a result of globalization and emerging democratic style of governance in the developing countries, the direction of research has been firmly focused on the task of rebuilding the necessary system and public infrastructure to provide credible leadership to its citizens, Wynne (2005) declares that there is a growing interest in the last decade or so, regarding the quality of public sector management in developing countries. In this regard, Sarker (2006) explores the factors which have affected the adoption of NPM in the developing countries, such as

Singapore and Bangladesh. In Singapore this study indicated there are some factors such as the advanced level of economic development, the existence of a formal market economy, the rule of law, the advanced level of administrative infrastructure and state efficiency have affected the success of NPM-oriented reforms. On the other hand, Bangladesh has achieved very little in NPM initiatives. The findings also indicate that there is still a greater role of the state in socio-economic transformation in general and implementation of market-oriented reforms in particular.

Schacter (2000) states that rather than prescriptive solutions, the main solution lie with strengthening the inherent capacity. The author indicated a struggling third world country with a high level debt, transforming itself to a developed country all through strengthening of its capacity. The main areas of transformation is first of all with the structuring of the civil service which in developing countries still experiences bureaucracy, poor management, waste of resources and corruption. Skills training in the context of operational goals are a first step to revitalizing the structure for accountability in the public sector. In this regard, Schacter (2000) indicates other activities include as follows:

- An overhaul of the restructuring capacity at each operational level of government with priority placed on specific skills which directly contribute to the nations' development
- Encouraging of cross-functional linkages among key governmental agencies to improve quality and delivery of public services
- Encouraging incentives schemes which are tied to performance measures.

Briston (1990) states that the challenges faced by developing nations in tackling their public sector is mainly down to a number of other issues such as differing needs, literacy level and style of governance. Briston (1990:215) referees to this fact, stating:

> *"...Each country is different and has different needs. The purpose of accounting is to serve society. As a consequence, accounting is likely to be influenced by the different political, economic, social and religious environments in which it operates".*

In terms of the available systems in place, most of the public services model of governance are more of the centralized decision making model, however, this has been hampered due to political instability which encourages misappropriation and mismanagement of public funds, lack of accountability, inability to manage resources and a dictatorial approach to management. Mwita (2000) states that this has indeed been the bane of most developing countries and the most evident source of under-utilization of natural resources and the absence of the adequate public management structures. It is therefore crucial for research to be aimed at developing a viable model of public service management in most developing countries and that they should compete with the developed countries.

The NPM reforms supply explanations for many Functional disorders that the governments in the developing countries are facing. However, the developing countries such as East and Southeast Asia suggest that the government may have a different relationship to society than in some of the Western countries that have adopted NPM (Turner, 2002). The governments in these countries played a significant role in invigorating economic development. These governments have demonstrated efficiency in transforming their societies by performing both direct and indirect roles (Cheung, 2002; Cheung and Scott, 2003; Leung, 2003). However, a host of developing countries are leading the trail of rapid development of accounting systems similar to what is obtained in the developed countries (Polidano, 1999).

A number of pilot schemes which have been partly implemented in a few developing countries include accounting techniques which monitors budgetary allocations to local councils with the central government monitoring allocations to promote efficiency and value for money. A few developing countries that are currently doing this successfully include; Ghana, Tanzania, South Africa, Jamaica and Singapore who have all adopted the UK model of public management, (Polidano, 1999).

Beschel (1995) indicates that with this integration of the models from developed countries has seen the increase in efficiency in a few of those countries such as South Africa and Ghana. The author however states that areas are lacking in these countries are budgeting, financial control, and staff classification and control which would require further development.

With regard to effective control mechanisms, in the same time vein, (Wallace, 1990) stresses the establishment of the mechanisms to ensure effective central control over all the departmental functions. Wallace, (1990) points to these as the only foundation that can establish accountability as without a grip on accountability and the eradication of corruption, the other management systems cannot be effective as the vital foundations are missing. Ma and Ni (2008) found that in developing countries such as China properly designed budgetary controls and local government accounting systems helped to reduce the opportunities for financial corruption and improved the regulation of local government agencies.

Tambulasi (2007) examines the introduction of management accounting techniques associated with new NPM in Malawi local government and its impact on political control and the extent to which NPM-based management accounting practices have increased managerial autonomy (decentralisation) and reduced political control (centralisation). Tambulasi's (2007) study discusses the effectiveness of public sector management accounting imposed by the World Bank that emphasises private sector methods and supports the role of managers. In Malawian local government, the reforms increased decentralisation of the expense and control, where the central government sought devolution of control to local government. On the other hand, the administrators sustain their managererial autonomy through NPM of managerial prerogative, seeking central government intervention and colluding with the councillors in corrupt activities. Furthermore, Tambulasi (2009) studied the impact of the NPM on corruption at the Malawian local government. He found that NPM reforms in Malawi have led to increased levels of corruption. This situation could have massive negative impacts on economic development.

International institutions have promoted NPM reforms in all developing countries (Ayeni, 2002). The NPM reforms, budgetary and institutional reforms, and the Budget

Allocation system were introduced in 1989. Through this, the budget allocations and budgetary control reforms are known in Singapore Government known as management accounting system. It provides computerised management accounting information so that managers can control and analyse the cost and performance of their services or activities to deliver the efficiency and effectiveness of their services (Cheung, 2003). The fundamental features of NPM have been included: a change from input controls and bureaucratic procedures, rules and standards to outcomes, measures and performance targets and, devolution of management control coupled with the development of improved reporting, monitoring and accountability mechanisms in Uganda public sector (Awio *et al.*, 2007).

In terms of management accounting information, several authors have carried out case studies on management accounting in use of different organisations and control to understand the mechanisms of how management accounting and control systems operates effectively, (Rahaman and Lawrence, 2001; Tambulasi, 2007; Awio *et al.*, 2007).
The studies of management accounting practices in such public sector entities especially in different local governments of developing countries have raised four main issues. These issues are budget and planning preparation, budgetary control, performance evaluation, and the factors which have affected the application of management accounting techniques.

3-10-1 Budget and planning preparation

According to Tambulasi (2007) who stipulates that the management accounting practices are essential for the public sector and should be used to obtain reports for decision making to support the organizational requirements. Within Saudi Arabian municipalities, Al-Dhowaihy (2003) examines the current role of management accounting practices in Saudi Arabian municipalities through use a literature review, questionnaire and interviews to get appropriate information. Al-Dhowaihy (2003) identifies that the key purpose of management accounting was to enable the municipalities to comply with central government regulations. Notwithstanding, Awio (2007) identifies that the non-compliance with government regulations is relatively low regarding budgeting practices. However, Awio (2007) linked non-compliance with corrupt practices. In this regard, the local governments in Uganda follow a standard budget process and face no need for approval from the central government (Obwona *et al.*, 2000).

In this regard, Ouda (2003) indicates that there is a strong relationship exists between the budget and the accounting system and they complement each other. In public sector organisations or not for profit organisations in Malaysia, Singapore, Thailand, and Philippines, the annual budget is seen as the central plank of management accounting. This partly reflects the environment in which public service operations have had to exist where their emphasis is on the short-term, in particular the current fiscal year. Where this is the case, then the main tool for management in planning, coordinating, and the organisation and control of activities is the annual budget.

The central governance requirements for annual budget process and budgetary control do not impact on the independence of the municipal authorities' decision making and budget process for revenue and expenditure (Al-Dhowaihy, 2003). In this respect, Aragon and Casas (2009) explain the budget process in Peruvian Municipalities, where the budget process is used to allocate an expected revenue source to an expected expenditure item. This process is according to legal requirements and thus complies with central government regulations for the budget and planning process along with the necessary earmarking conditions to match revenue to expenditure budget (Aragon and Casas, 2009). The budget process starts prior to the fiscal spending year so that planning is undertaken before the actual expenditure occurs. Aragon and Casas (2009) identify that during the fiscal year the budget is continuously updated reacting to changes in expected revenues and expenditures as they occur. Central Government at the end of the fiscal year then approve the final budget and at this point there can be no further modifications to the approved budget (Aragon and Casas, 2009).

In some developing countries such as Philippines, South Africa, Tanzania, Ukraine, Vietnam, Malaysia and Uganda, Andrews and Shah (2005) point out, budget processes in developing countries are important and has typically not been citizen friendly. To make participation functional, several significant revisions are needed: (a) budget data must be classified in ways that are meaningful to the citizenry; (b) the budget needs to be prepared in a way that is accessible to the citizenry; (c) the budget must clearly communicate the core responsibilities of officials; and (d) the budget must clearly report crucial features of fiscal operations (outlays, revenues, deficits or surpluses, performance outcomes, and so on). Al-Dhowaihy (2003) states that in Saudi Arabian municipalities there is a budget committee is the main body responsible for preparing the budget. In addition, the annual budget and development planning process is an essential requirement of local government this process may supply various budgetary control ways for developmental expenses and operating expenses. The budget process has created problems in some developing countries because the recurring funds are ignored in the budget process, coordination between mostly developmental and mostly operating programs is not undertaken and development programs are often planned without regard to priorities and resource constraints (Alm and Boex 2002; Sarraf 2005).

Claassens and Van Zyl (2005) examines the central government budget in 9 Sub-Saharan nations (Botswana, Burkina Faso, Ghana, Kenya, Namibia, Nigeria, South Africa, Uganda, and Zambia) where they stated that there is detailed legal framework governing the central government budget system. The framework derives from the Constitution of Botswana, and various other laws and regulations. The legal framework prescribes clear authority, procedurès and time-frames for each phase of the budget cycle. The Legislature has clear authority over the approval of budget estimates and expenditure. However, the legal framework does not clarify the exact nature of legislative amendment powers. There is no law ensuring public access to information (including budget information). In addition the budget process is regarded as an integral part of its broader development planning process. Strong capacity and systems are in place to ensure that budget planning and implementation is kept in line with the nation's development goals.

More recently, Iyoha and Oyerinde (2010) explain that budget planning and effective implementation In Nigerian government can be a vital tool for ensuring integrity in public expenditure. This is because the budget allocates resources according to rules and procedures established for claiming and rationing those resources. The public expenditure cannot in principle be executed in Nigeria without an approved budget. Therefore approved annual budgets remain one of the important legal bases for public expenditure.

Wong, (2007: 6-7) concludes that the reform in budget preparation of Chinese public sector was the introduction of departmental budgets, which had several important objectives:

- *"To improve transparency. In the past, the budget showed appropriations by sector, and the sectoral amounts were cut up into pieces for different ministries and organisations. Therefore, it was hard to know how much education and training, for example, was performed by each ministry.*
- *To improve budgeting. Under... the introduction of departmental budgets, making budget proposals to multiple departments and organisations was a cumbersome and unpredictable process for spending units.*
- *To harden the budget constraint for each spending unit. The absence of a departmental breakdown in the budget approved by the National People's Congress meant that there were no spending limits per line ministry. Instead, the sectoral budget was a common pool of funds for individual line ministries operating in the sector, and it opened the door for the ministries to lobby the Ministry of Finance for more funding throughout the year for priority projects. With a departmental budget, approval by the National People's Congress ends the negotiation for resources.*
- *To improve accountability for spending. With departmental budgets spelling out how much is being spent by each spending unit, the precondition now exists to hold each ministry responsible for delivering results".*

Hou and Ma (2006) argue that through greater integration between budget preparation and organisational planning that there is better control in the spending of resources for services. In China, Hou and Ma (2006) found that with the 1999 the Departmental Budget Reforms that there was greater control and the reduction of fraud. Ma (2009b) identifies that for developing nations to develop the ability to budget effectively they need to first establish a well-controlled budgeting system that provide the information and control necessary. With the Chinese Departmental Budget Reforms, Ma (2009b) found that standardised budgetary formats and procedures were designed and strictly enforced requiring all government departmental agencies to consolidate all their revenue and expenditure into their departmental budget. Through this preparation of the departmental budget is improving allocative efficiency.

Ramadhan (2009) summarises that there are essential steps which deal with the budget preparation and the approval of the budget of Bahraini government observes a three step process that starts with the Budget circular process, then the Revenue and expenditure estimation followed by Steering Committee approval activities.

In the Budget circular process the budget directorate issues policy guidelines and instructions to all ministries and government organisations concerning the upcoming budget proposals. The circular includes the rules and procedures to be followed in preparing budget proposals; general instructions; method of estimating revenues and expenditure; sample tables and formats and instructions to fill them; and procedures for preparation of data entry spreadsheets. The ministries and other government organisations are required to follow the specific policy guidelines that are issued in the budget circular. The guidelines include financial and economic policies approved by the Cabinet; current situation and future economic outlook of the country; growth rates achieved; revenue enhancement measures; rationalize expenditure and enhance and support the role of the private sector in social and economic development through privatisation or the provision and management of some public services; and any comments and recommendations raised by members of the Parliament and Consultative Council during their discussion of the budget for the previous year. The policy guidelines are provided to administrators to ensure that they are following the current policy decisions and addressing issues identified in previous budget preparation activities. The circular process also includes the budget instructions which should be considered when preparing the budget; instructions on how to prepare and implement the budget; forms and work sheets to be filled when preparing revenue and expenditure estimates; actual revenues of previous year; expected growth rates and decrease in the level of a service or activity; and any expected increase in revenues (Ramadhan, 2009).

The second step of the Bahraini government budget process identified by Ramadhan (2009) is the revenue and expenditure estimates and this is where all ministries and government organisations prepare their own revenue and expenditure budgets in accordance with the instructions issued by the Minister of Finance and submit them to the budget directorate. The following bases are normally used to estimate revenues and expenditures.

First the revenues estimate

> *"(a) Previous year's actual results.*
> *(b) Likely expansion in revenue base and likely increase in revenue rate (e.g. production quantities of oil and expected oil prices in a conservative manner).*
> *(c) Investment income is estimated on the basis of actual income in the previous year from shares and dividends in a number of companies and banks in Bahrain and the Arab region in which the government has a stake.*
> *(d) Non-oil revenues (comprising taxes, fees and government sale of electricity, water and other services) are based on actual revenues of previous year and considering a 3% growth rate and using statistical techniques such as trend analysis.*

(e) Grants. These are estimated based on the directions of the leadership of the kingdom at the level of previous year to be received from Kuwait and United Arab Emirates. The actual realisation of these grants depends on the leadership of the respective countries and prevailing circumstances.
(f) Other revenues like licenses, fees, fines, permits and penalties are based on previous year's actual results and policy guidelines by the management of the department concerned.
(g) New changes in activities of the economy which have effects on revenues.
(h) Projected current year surplus or deficit''.

(Ramadhan, 2009: 173)

Second the expenditure estimates

''(a) Recurring expenditures (i.e. salaries and wages) are estimated based on actual results plus 3% of basic salaries budget to cover annual increase in salaries and government annual contribution to the pension fund.
(b) Changes in wages and salary levels.
(c) Forecast market prices of capital equipment and other goods and services.
(d) Financing opportunities available to the government.
(e) Actual and fixed obligations against expenditures and matured loans.
(f) Programs and projects which have been approved by the cabinet.
(g) Consultants' estimates of costs of new projects.
(h) Instructions included in the budget preparation circular''.

(Ramadhan, 2009: 174)

The final step in the Bahraini government budget process is where the draft budget will be modified, as required, in terms of the decisions of the Steering Committee and re-submitted for approval by the Minister of Finance who presents the budget accompanied by the supporting statements to cabinet for approval. The Minister will then presents the final draft of the budget to the Parliament and the Consultative Council, for the final approval after which it is then issued by law (Ramadhan, 2009).

In several developing countries especially the Asia-Pacific region Ouda (2003) discusses the application of management accounting and the link between NPM reform and budgeting reform in a number of developing countries such as (Malaysia, Singapore, Thailand, and Philippines) where he recognized that in the local governments employed the cash-based system for budget preparation and recommended that the central and local governments of this region should shift from cash-based to accrual-based systems. The rationale was this system change would improve accountability and reduce the opportunities for malfeasance (Ouda, 2003). Al-Dhowaihy (2003) supports Ouda's (2003) recommendation for the use of accrual-based systems when he highlighted that without the use of accrual systems it was difficult for the agencies to maintain and track their contractual obligations over a short to long term period of time.

Furthermore, Mahdavi and Funnell (2003) conclude that to meet broader, managerial idea of accountability, the central and local government are recommended to use the accrual-base in the their accounting. In addition there is a study aimed to assess the Malaysian accounting techniques in government sector through using archival research such as government publications, Acts and regulations, annual reports, government circulars, seminar and training manuals from government departments in Malaysia and other forms of record relevant to the issues of study. Most of these documents were obtained from the Accountant General's Department in Malaysia. This study provides deep understanding of changes from a cash-based to an accrual-based in management accounting, and it recommends for the further research to assess the acceptance of major changes from a cash-based to an accrual-based in the accounting among the government accountants in developing countries (Saleh, K. 2007).

Saleh and Pendlebury (2010) identify that although there has been some change from the cash-based to accrual-based accounting system within Malaysia. Government practitioners according to Saleh and Pendlebury (2010) strongly recommend that a change to accrual based accounting occurred for local government authorities in order to introduce management accounting and control purposes, and to meet the challenges of the current global economy. In this respect, there is a study conducted by Semi-structured interviews with politicians, civil servants in central government ministries, professional accountants and a range of municipal officials, all responses were supported by a review of documentation relating to Malagasy municipalities where this study found that there was an insufficient influence of the Malagasy national accounting institute to support the adoption of accrual-based in Malagasy municipalities. In addition, a bureaucratic system centralised on the president, political support is essential to ensure the implementation of accrual-based in both central government and the municipalities in Malagasy (Oliorilanto, 2008). The implementation of accrual-based accounting system is seen as the first step to enable the region to implement modern management accounting approaches such as PPB (Al-Dhowaihy, 2003). Therefore, in local governments in developing countries, there is need for improved 'budgeting and financial planning' will increase (Schroeder, 2007: 47).

Regarding, the management accounting approaches for budget preparation, the traditional budgeting approaches such as line-item budgeting and incremental budgeting were utilised for budget preparation in developing countries, but unfortunately those approaches are not able to provide the information of evaluation an efficient and effective government (Ouda, 2003). In this regard Awio (2007) points out that the community projects in Uganda public sector use approach and procedures of line-item budgeting in budget and planning preparation. Therefore, there is a need to shift from traditional to PPB in central and local governments of the budget preparation (Ouda, 2003).

In Iranian local government, Mahdavi and Funnell (2003) state that there is substantial need for change in accounting systems in Iran. The current management accounting techniques and procedures cannot adequately for providing information to accomplish the goals of the public programs of the nation. Consequently, this information is insufficient to ensure the fulfilment of government plans aimed at a strong economy and higher living standards.

Ramadhan (2009) concludes that the line-item approach is used for preparing the budget by the Bahraini government departments. Ramadhan (2009) found that some of the participants in his study were dissatisfied in this approach to budget preparation. There are changes being implemented to address the line-item budgeting approach and this can be found in the Bahraini State Budget Law according to Ramadhan (2009) who advises that the gradual implementation of performance and program budgeting beside line-item budgets is been undertaken to improve the overall efficiency, effectiveness, transparency, performance, and accountability. Al-Dhowaihy, (2003) states that the traditional budgeting approaches, such as line-item budgeting and incremental budgeting approach, followed for budget and planning preparation the Saudi municipalities should be improved by introducing PPB through long-term planning and clear objectives and by measuring performance against the given objectives and goals. Also, Almohaimeed, (2000) recommends the use of ZBB or PPB approaches in order to improve the efficiency and effectiveness of public sector performance in Saudi Arabia. Almohaimeed, (2000) asserts:

> ''.... *The traditional budgeting approach followed in the Saudi public sector should be changed into planning programming budgeting or zero-base budgeting. By focusing on the inputs, outputs and objectives and operations, these two approaches are likely to improve decision-making and future planning in the public sector organisations''* (Almohaimeed, 2000: 362).

In china, to move away from the passive, incremental budgeting based on past allocations, the Ministry of Finance has also promoted the use of ZBB for all public expenditures (Wong, 2007). The introduction of ZBB for government agencies according Ma (2009b) has improved budget rationality and therefore budget efficiency while reducing fiscal fraud.

In the UAE, Alkaleb (2009) indicates the budget preparation and future development planning Preparation of federal government were based on traditional approach, which focuses on the inputs only, this method does not provide decision makers with the necessary information that enables them to determine spending priorities and thus does not make optimum use of public funds. In this respect the UAE government was made decision No (631 / 1) on 12/11/2001 to shift from traditional approach to the application of PPB approach. This application started in 2002 and it made a major changes in the working environment of a focus on inputs only to the link between inputs and outputs, these changes help improve decision-making and to give better information on the adequacy of government services to the needs of society. In addition, the main purposes from applying this approach are:

- The development of the accounting system, and keep pace with global developments in the field of modern accounting systems.
- Line-item budgeting and incremental budgeting as traditional approach are focused on the inputs only, and this approach does not provide decision makers with the necessary information that enables them to determine spending priorities and thus does not make optimum use of public funds.

3-10-2 Budgetary Control

In this regard, management accounting in Singapore is integrated into the public service system to enhance the functions of reporting especially regarding cost and ensures better decision making functions (Hong, 1991).

With respect to, the budgetary control information, Al-Dhowaihy (2003) explains that budgetary control information in Saudi municipalities was provided by finance officers to some governmental bodies, monthly and quarterly to undertake the responsibility to monitor actual achievements against plans and budget figures. This information was provided from spending departments' own records. On-line access was minimal but a few municipalities did rely on hard copy computer printouts provided by financial departments. In this regard, the control in Uganda public sector is attained through budget control ensuring that actual expenditures do not exceed budget proposals. Under NPM reforms, a budgeting has moved to become linked with other processes, such as planning, operational management and performance measurement (Awio, 2007).

Aragon and Casas (2009) indicate that Peruvian Municipalities also have to report budgetary information to the central government for determining the extent of compliancy with earmarking conditions and central government regulations. In addition, this information is used by Central Government to prepare the national budget, national accounts and to monitor the activity of local governments (Aragon and Casas, 2009). In the Bahraini government organisations, there are internal audit and internal control systems to ensure compliance with rules and procedures. Among these are the requirement of utilising the resources and inputs to achieve what is known as "*value for money*" (Ramadhan, 2009).

Curristine and Bas (2007) conclude that the public sectors in Latin America countries were controlling expenditure for ensuring compliance with the budget laws and enforcing effective control of budgetary expenditure. In this respect, Al-Dhowaihy (2003) confirms that the main goal of the budgetary control system in Saudi Arabian municipalities is to comply with governmental regulations and to increase central governmental control over municipalities' activities. In order to achieve compliance with laws and regulations issued by the Council of Ministers and various other authorities, budgetary control procedures in the Saudi Arabian government focus on legal accountability (Almohaimeed, 2000). The role of budgeting in accountability in Nigeria has not been fully appreciated and taken very seriously as budget indiscipline adorns some of the activities of government at all levels (Iyoha and Oyerinde, 2010).

In Bangladesh public sector, Mollah (2008) defines the accountability as means answerability for the discharge of duties or conduct. It requires satisfactory reasons to be provided for one's conduct and an acknowledgment of responsibility for one's actions. In this respect Mollah (2008) states that there is a lack of accountability by the administrators. This lack of accountability of the administrators is one of the basic impediments to the establishment of good governance and successful democracy. Public officials should be held to account for their poor performance or delayed actions, and therefore such accountability should ensure better performance by the officials and the appropriate use of public resources.

Mahdavi and Funnell (2003) examine the accountability that the executives must fulfil in the public sector of Iran and the role of accounting in meeting accountability obligations. They concluded that accountability is used, in order to the stewardship of resources appropriated by parliament. In this regard, Iyoha and Oyerinde, (2010) concludes that there has been lack of accountability for public expenditure in Nigeria, but there were efforts to ensure that public expectations are met in the allocation and use of funds.

In the China there has been a move from a planned economy to a market economy during the last 20 years while retaining the same political structure (Hou and Ma, 2006; Ma, 2009a) which has some similarities to the Libyan context. With budgetary control in China according to Ma (2009a) the aim in developing greater control was the political will to address and control corruption by increasing the levels of accountability, reduce resource squandering and improve the efficiency of local government agencies. The experiences of China between 1978 and 1999 of not having a budgetary control system in place created a vacuum where local authorities were expected to work within a budget amount without having a defined budget (Ma, 2009a). Since the development of budgetary reform in 1999 China has begun to establish a uniform centralised budget control approach within government which comprises of three main aspects of department budget reform, treasury management reform and procurement reform. These reforms have been facilitated by legislative initiatives and increasing responsibility levels for accountability for all sectors involved with government finance (Ma, 2009a).

3-10-3 Performance Evaluation

In Singapore the best practice of management accounting in the public sector is aimed at ensuring efficiency and effectiveness through an internal control system (Hong, 1991). Ouda (2003) indicates that the accounts explain the amounts of receipts and expenditures compared with the budgeted figures and therefore the measure of performance is only the comparison of budget proposal with actual income and expenditure. In this respect, Almohaimeed (2000) evaluates the degree to which the current system of performance in the Saudi public sector bodies has been effectively operationalised. Almohaimeed (2000) indicates some limitations in the current practices of performance auditing in Saudi public sector. Where major deficiencies were: the lack of clear objectives and performance measures for public organisations; weaknesses in the accounting and internal control systems in public organisations; the shortage of both financial resources and competent manpower assigned to performance auditing departments within the General Audit Bureau; and the absence of an appropriate mechanism for enforcing the recommendations of performance. Therefore, he pointed to the need for a number of changes in relation to in performance measurement, the goals and objectives of public sector bodies, and the application of management accounting and internal control, in order to solve the shortcomings.

More recently, the improvements in Saudi municipalities' performance in the services provided and revenue collection is recommended. Al-Dekhail (2010) suggests either complete privatisation or partnership arrangements with the private sector are essential to improve their performance. However, Al-Dekhail (2010) also referred to possible problems, including the complexity of regulations, central government control, and the lack of information available to the private sector about municipal services.

Curristine and Bas (2007) indicate that Latin America countries adopted several budget reforms to improve fiscal policy and transparency, to control public sector spending, and to improve public sector performance and efficiency. There has also been increased emphasis on achieving the sub-objectives of budget systems, mainly to allocate resources in accordance with government priorities and to promote the efficient delivery of services. Efforts to improve the performance and efficiency of the public sector have incorporated attempts to introduce performance information into budgeting and management processes.

Regarding, demands and provision performance in developing countries, Mimba *et al.*, (2007) however, advocate a different perspective and state that public sector organisations in most developing countries must rediscover the balance between the demands and provision of performance information. The author stated that the need for speedy public service performance from the stakeholders often leads to counter-productive measures and unsatisfied demand position, as the low institutional ability coupled with the high level of corruption undermines the balance which needs to be addressed.

Alruwais (2007) explained the justification for implementation of performance measurement systems in the context of the balanced scorecard approach in the Saudi public sector particularly telecommunications. Alruwais (2007) points out that the competitive environment especially from the other publicly owned commercial enterprise was one of the strong reasons for implementing the balanced scorecard approach. However, there were still lots of questions on the viability of the approach especially as it concerned the organization's finances. The measurement of public sector performance is important because of the impact that it has on the performance of organisations. Where the organisational performance is strong, it can be inferred that the organisation will provide effective and efficient services (Mimba *et al.*, 2007).

In Malaysian public sector, the information must be collected regularly to ensure that the performance is in line with predetermined performance indicators and targets. Performance measurement and reporting is the key to effectiveness of results (Siddiquee, 2010).

With respect to, performance reporting, Ramadhan (2009) states that the Bahraini government organisations are have legal requirements to submit quarterly reports to the Minister of Finance about their activities and development of their financial status and other information specified by the Minister of Finance. This is part of the Bahraini performance monitoring and fits in with Mimba *et al.*, (2007) advice about maintaining strong organisational performance to provided effective and efficient services. The Minister of Finance also reports periodically to the cabinet, the progress of the implementation of the state budget, to provide information reflecting the financial performance and position of the government and any other relevant matters Ramadhan (2009). The Bahraini Minister of Finance publishes that report, within one month after the end of each quarter, in the Official Gazette according to Ramadhan (2009), including a summary of government financial statistics and aggregate total concerning the performance of the national economy similar to Saudi Arabian practices according to Al-Dhowaihy (2003).

Tooley *et al.*, (2010) provide a better understanding of accountability within Malaysian local authority setting and explains the increasing Malaysian public sector for increased transparency in the performance information regarding effective and efficient delivery of public services. The study results indicated that the information regarding both the existing financial position and performance and future plans and future performance targets as of the most importance, and showed that there is an interest in performance information; for instance, financial and non-financial information and future-oriented information. On the other hand, Al-Dhowaihy (2003) concludes that non-financial output measures were not included within the annual budget of Saudi Arabian municipalities for performance evaluation. One way to address this issue can be seen in another budgetary reform of public sectors in Latin American countries where they have developed performance measures (outputs and outcomes) and evaluation processes (Curristine and

Bas, 2007). A number of Latin American countries within the last five years according to Curristine and Bas (2007) have introduced performance measurement systems for at least some programmes. In the majority of Latin American countries, these reforms are enacted in legislation. While progress has been made with the initial development of performance information frameworks, many countries are struggling with improving the quantity and quality of performance information (Curristine and Bas, 2007).

In this regard, there is a general consensus by respondents for Malaysian local authorities to communicate their information within performance report as performance measures. This report included quantitative and qualitative information (financial and non-financial information) of local authorities' performance, whereas there is an interest of stakeholders in local authorities in order to meet the information demands of public sector accountability (Tooley *et al.*, 2010). Unfortunately, studies on central government budgeting in 9 Sub-Saharan nations mentioned above suggest that much work remains to be done in the area of budget accountability and transparency. These studies identify inadequate transparency in all four stages of the budget process: formulation, legislation, execution and monitoring, and auditing. Even so, the nine Sub-Saharan cases showed increasing civil society and legislative interest and demand for transparency, access and results (Claassens and Van Zyl, 2005).

3-10-4 The factors which have affected the application of management accounting techniques

The key objectives for best practice of management accounting in Singapore public sector is the total elimination of bureaucracy through eliminating barriers which prevent speedy policy implementation such as reducing the layers and structures in decision making, thereby ensuring quick implementation of projects. In addition the key elements for obtaining the best practices of management accounting are training, incentives, motivation, reward and appraisals, and therefore, these elements have affected management accounting practices (Hong, 1991). In this regard Al-Dhowaihy (2003) confirms that economic factors have affected management accounting practices employed by municipalities. But he ignored other factors such as (top management support, incentive systems, and adequate financial resources for accounting development ....) which might have affected management accounting practices used in municipalities. He indicates the need for more researches in management accounting field in the local governments of developing countries.

In Malaysian government sector the accounting techniques generally have affected by several factors. In this respect Saleh, Z (2007) studies Malaysian accounting techniques in government sector those techniques have influenced by some factors such as environment and advisory responsibilities and accountants with knowledge accounting, but professional bodies did not affected the reforms of accounting techniques in government sector, and therefore further research is needed to assess other factors did not address in this study. In addition, the factors that have affected the accounting reforms in

Malagasy municipalities were concluded by Oliorilanto (2008) these factors are synergy between accountants and civil servants, political support from central government and the accounting organization. Saleh and Pendlebury (2010) identify in Malaysia six grouped factors which could improve governmental accounting which included increased professionalism, technological change, public demand, political incentives to change, demand in performance improvements from creditors and the effect of financial crisis on public programs.

Mimba *et al.*, (2007) summarise the factors that influence the application and design of performance measurement systems in developing countries. They found that the involvement of stakeholders in the public sector of developing countries was low, also the high levels of corruption and informality contributed to this situation. However, an important factor is the financial support that often goes alongside with requirements for reform, including a decentralisation of responsibilities to lower governmental layers, a marketisation of the public sector, the implementation of anti-corruption programmes.

In South African organisations, Waweru *et al.*, (2004) indicate that such a contingent perspective, one would predict that different environmental conditions might create the need for different types of management accounting systems. They explored the following questions:

> *". What are the management accounting systems in use in the case organisations?*
> *.Have management accounting systems in the case organisations changed significantly during the last decade?*
> *. What factors facilitate and/or hinder management accounting systems change in the case organisations?"*
>
> (Waweru *et al.*, 2004: 679)

In this regard, Al-Akra *et al.*, (2009) conclude that the political and economic factors such as privatization and the resulting accounting reforms contributed to the development of accounting practices in Jordan public sector. Privatization in Jordan led to the transformation of Jordan's accounting regulations to meet the new market structure and governance requirements. In addition, Al-Akra *et al.*, (2009) indicate that the influence of colonization is more critical to explaining Jordan's accounting practices than the influence of culture and religion. The study also demonstrates that business ownership has been significantly influenced by privatization.

Waweru *et al.*, (2004) states that there are many factors that obstruct management accounting change such as increase in local/global competition after the liberalisation of the South African economy; changes in technology, in particular information technology; and poor financial performance. Furthermore, there are additional factors hindering management accounting change, the following factors were mentioned: lack of adequate computing facilities; lack of adequate accounting skills; new shareholders; fear of change; "*no need for change*" attitude; and lack of adequate communication between management and staff.

In Nigeria, Iyoha and Oyerinde (2010) point out that the accounting in Nigerian public sector has been affected by the following reasons.

(a) Professional accounting bodies.

(b) Qualified accounting staff

(c) Laws and regulating accounting

(d) Quality graduates

(e) Accounting and auditing Standards.

Table 3-3: Summary of previous related studies in developing countries

Source	Country	Methods	Main Findings
Hong (1991)	Singapore	Literature review	- Management accounting in the public sector aims to ensure an efficiency and effectiveness through the internal control system and auditing. - Management accounting is used to enhance the functions of reporting into the public service system. - Training, incentives, reward and appraisals, and therefore, these elements have affected management accounting practices in public sector.
Beschèl (1995)	South Africa and Ghana	Literature review	- The usefulness from developed countries experience makes increase in the efficiency of services. - Budgeting, control, and staff classification require further improvement and development in different aspects.
Polidano (1999)	Ghana, Tanzania, South Africa, Jamaica.	Survey	- Accounting techniques which monitor budgetary allocations to local councils with the central government monitoring allocations to promote efficiency and value for money. - A host of developing countries are leading the trail of rapid development of accounting systems similar to what is obtained in the developed countries.
Mwita (2000)	Not stated	Literature review	- The performance management is used in the context of local government systems. - This study provides a comprehensive summary to look at the role of management accounting system in meeting the information needs.
Obwona et. al (2000)	Uganda	Document analysis	- The findings showed the history of decentralisation in Uganda. - The Decentralisation Secretariat and the associations of local government in Uganda have facilitated dialogue between central and local government in the process of addressing the future challenges. - A number of appropriate initiatives have been taken within the field of financial management and the relations between central and local government in the field of budgeting.

Schacter (2000)	Not stated	Literature review	- Encouraging of governmental agencies to improve quality and delivery of public services. - Encouraging incentives systems are tied to performance measures. - The operational goals are a first step for accountability in the public sector.
Almohaimeed (2000)	Saudi Arabian public sector	Questionnaire survey,	- The research also indicated that moderate improvements have been brought into the Saudi public sector by performance auditing practices. - The research identified internal and external, environment which prevented the performance auditing to the public sector. External limitations include the vagueness of goals in public organisations, the lack of performance measures in the public sector and the lack of sound financial accounting and internal control systems, while the lack of sufficient audit staff, the lack of expertise from different disciplines and the lack of sufficient financial resources represent the major internal limitations.
Rahaman and Lawrence, (2001)	Ghana government departments for public services	Interviews and document analysis	- The findings explored the conventional view about the widespread deficiency of public sector accounting and financial management in developing countries. - The accounting literature suggests that a problem in developing countries is that of poor accounting systems in their public sector organizations and they need more reforms. - An absence of appropriately qualified staff and poorly designed accounting systems leads to unreliable financial information to make sensible economic decisions - There is an urgent need for financial and management accounting research in the local public sector of most developing countries.
Turner (2002)	Southeast Asia Public sector (Thailand, Philippine, Malaysia, Kuala Lumpur, Burma, Indonesia, Singapore, Laos and Vietnam).	Literature review	- The findings reported that the public sector reforms are not new to Southeast Asia and these reforms derived from USA and European experience. - The efficiency appears to be the driving force of NPM. - Political regimes in Southeast Asia have not conformed to the models of Western liberal democracies found among the NPM originators.
Alm and Boex (2002)	Nigeria	Literature review and government reports	- Nigeria is an effectively decentralized country. - This study explained fiscal management issues, including the importance of development budgets in the Nigerian Local government. - This study pointed out that state and local governments provide important government services, collecting own source revenues and receiving intergovernmental transfers.

Cheung (2003)	Singapore Government	Literature review	- Provide an understanding of public service reforms in Singapore since the 1990s. - The study explained that budget allocations and budgetary control reforms are known in Singapore Government as management accounting system. - It provides computerised management accounting information so that managers can control and analyse the cost and performance of their services or activities to deliver the efficiency and effectiveness of their services
Leung (2003)	The Republic of Korea	Literature review	- The findings showed the public sector reforms in Korea after the financial crisis in 1997. - The state continues to play a key role, in the formulation of policies and the coordination of the societal actors whose support has been fundamental for reforms. - The main reforms in public sector aim to improve administrative efficiency.
Ouda (2003)	Malaysia, Singapore, Thailand, and Philippines	Literature review and interview	- The governments in the Arab countries are still using the traditional accounting system (which is cash-based system) and traditional budgeting system (line-item based budget system). - There is a need to change from cash base to accrual base in central and Local governments accounting; and to shift from traditional (line-item budgeting) to program performance budgeting in the budget preparation of the central and Local governments in Arab countries.
Al-Dhowaihy (2003)	Saudi Arabian	Literature review ,questioner survey and Semi-structured interviews	- Management accounting in municipalities is different from that of other public or private sector organizations. - The main tools of management accounting in municipalities are budget preparation and budgetary control. - The main purpose of management accounting in municipalities directed to comply with government regulations. - Little attention given to the planning and control in municipalities. - The economic factors have affected management accounting practices employed by municipalities.
Mahdavi and Funnell (2003)	Iran	Literature review	- The current accounting techniques in the Iranian government cannot adequately for providing information to accomplish the goals of the public programs of the nation. - There is substantial need for change in accounting systems in Iran. - The accrual base should be used to ensure the accountability in the government sector of Iran in order to the stewardship of resources appropriated by parliament.

Waweru *et al.* (2004)	South African organizations	a face-to-face interview questionnaire survey	- The findings indicate considerable changes in management accounting systems within the four cases. - There are environmental changes in the South African economy arising from government reform/deregulation policy and global competition largely facilitated the management accounting change processes within the participating organizations.
Wynne (2005)	Developing countries (Ghana, Tanzania and Uganda)	Literature Review	- Public management reforms in have been adopted in African public sector. - public sector financial officers in developing countries were wise to accept these prescriptions quite so uncritically in preference to paying more attention to tried and tested financial controls and getting the basics right. - Additional research is needed to ascertain whether the introduction of these reforms can ensure the effective use of public sector resources whilst maintaining the principles of universality, equity and accountability.
Sarraf (2005)	Developing countries (Bangladesh, Botswana, Ethiopia, Jamaica, Lesotho, The Gambia, Uganda, Tanzania, Cameroon, Cape Verde, Central African Republic, Comoros, Guinée, Guinée Bissau, Madagascar, Niger, Rwanda, and Togo)	Literature review, documents	- This paper identifies and describes both domestic institutions and donor practices that have been contributing to separate recurrent and development budget management systems in different stages of the budget cycle. - This report offers practical guidance for management of annual or development budgets preparation, execution, and reporting of a unified budget system.
Andrews and Shah (2005)	Developing countries (Philippines, South Africa, Tanzania, Ukraine, Vietnam, Malaysia and Uganda)	Literature review, documents and reports	- The study explained the budgeting processes and documents. - This study clarified budgeting techniques that are used for budget preparation. - Budgeting and financial management reform and reporting process clarified government business. - There are proposed modifications on budgeting process that should be followed. - There is emphasised on public accountability through popular reporting. - Reporting appeared more influential when it comes through formal structures emerging from government.
Claassens and Van Zyl (2005)	(Botswana, Burkina Faso, Ghana, Kenya, Namibia, Nigeria, South Africa, Uganda, and Zambia)	documents and reports	- This report showed the budget transparency and participation. - The report presented the following points: 1-Legal framework for transparency. 2-Clarity of roles and responsibilities. 3-Public availability of information. 4-Capacity and systems in the budget

			process. 5-Management of extra-budgetary activities. 6-Participation in the budget process. 7-The role of donor funding.
Sarker (2006)	Singapore and Bangladesh	Literature Review	- There are some critical factors such as the advanced level of economic development, the existence of a formal market economy, the rule of law, the advanced level of administrative infrastructure and state efficiency for the success of NPM-oriented reforms. - The findings also indicate that there is still a greater role of the state in socio-economic transformation in general and implementation of market-oriented reforms in particular.
Hou and Ma (2006)	China	Literature Review	- This paper found that it is essential to integrate economic planning into annual budgets. - Some people challenge the necessity of adopting annual budgets in China, citing achievements in the past quarter century. - This paper recommends that China integrate budgeting and planning by adopting the annual budgeting upon financial programming but problems of various kinds will occur; those will require further, more specific research.
Tambulasi (2007)	Malawi's local governance	qualitative research	- The study has found that the NPM-based management accounting has led to loss of local political control. - provides information and insights for reformers to consider the social, political, and cultural environment of the implementing countries - The administrators sustain their managerial autonomy through NPM based managerial prerogatives, seeking central government intervention and colluding with the councillors in corrupt activities
Mimba *et al.* (2007)	Not stated	Literature review	- The public sector in developing countries faces an unbalanced position between the demand for and supply of performance information. - The public sector reforms are partly stimulated by a growing involvement of some stakeholders – lead to an increasing demand for performance information but, due to the high level of corruption this increasing demand is not always followed by a sufficient supply of performance information.
Schroeder (2007)	Developing countries	Literature review	- Annual budgets require that revenues for the upcoming fiscal year be estimated to clarify resource constraints as spending plans are formulated. - Local governments in developing countries attain

			greater fiscal authority and responsibility, - There is a need for improving budgeting and financial planning. - There is a lack of control over revenue and expenditure policies that is a challenge for local policy makers using fiscal forecasts. - In developing countries, the central government regulates local governments' fiscal decision making.
Alruwais (2007)	Saudi Arabian	Case study	- The Saudi public Telecommunications adopted the balanced scorecard approach as performance measurement systems. - The competitive environment with commercial enterprise is main reason for implementing the balanced scorecard in this sector.
Saleh (2007)	Malaysia	qualitative research	- There are changes in the accounting of local government from a cash-based system to an accrual-based system in accounting. - The accounting techniques in government sector have influenced by environment and professional bodies, advisory responsibilities and accountants with knowledge accounting.
Wong, (2007)	China	Literature review	- This study explained the that the Chinese government has made extensive reforms to its budgeting system over the past ten years - This study reviews budgeting cycle: formulation, approval, implementation and audit. - The study showed that the budget is still not complete in that important decisions are made outside of the budget process. - The capital budget is made separately from the recurrent budget with key decisions made by the National Development and Reform Commission. - The Ministry of Finance still does not have comprehensive authority on spending. Staffing decisions, which have major spending implications, are made by the State Commission Office for Public Sector Reform with little consultation with fiscal authorities. - The central government lacks effective control over the fiscal relations between provincial and lower level governments which is manifested by distinct differences across provinces.
Awio *et al.* (2007)	Ugandan	Documents and interviews	- This Ugandan illustration suggests potential benefits from importing workable aspects of NPM reforms while at the same time exploring other service delivery and accountability options that fit the needs of target communities in Uganda - The findings point to community-led approaches, such as those adopted in Uganda, as a promising alternative to NPM models for improving public service delivery and financial accountability in less-developed countries.

Awio (2007)	Ugandan Community projects	Interviews, documents and reports	- The findings stated that Ugandan community projects use basic and simple accounting procedures. - This study suggested that Uganda's community operate within a bottom-up accountability framework by taking a role in budgeting, program implementation, reporting, project-oversight, and audit activities. - The accountability mechanisms can compensate for the types of formal control mechanisms typically promoted within NPM-style reforms. - The study identified the measurement of social services within community groups.
Curristine and Bas (2007)	Latin American countries	questionnaire survey	- Latin American countries experienced pressure to improve fiscal discipline and transparency. - The majority of countries now have an organic budget law. Most countries introduced these laws - The role of the legislature in the budget process is heterogeneous across Latin American countries. In all the countries surveyed, the legislature can modify the executive's budget proposal; - A key challenge for Latin American countries is to foster and achieve budget transparency. Most of the countries have made many improvements in this field, enhancing transparency and boosting confidence in the budget process.
Oliorilanto (2008)	Malagasy	Semi-structured interviews	- The national accounting institute was insufficient to support the adoption of accrual accounting in both central government level and the municipalities. - The president and political support is important to ensure the implementation of accrual accounting.
Mollah (2008)	Bangladesh public sector	Interviews and Literature	- This paper discusses the present patterns of bureaucratic accountability in Bangladesh - Potential instruments for improved accountability are considered as well as the consequences of weak accountability. - It provides a case study of efforts made to improve accountability.
Ma and Ni (2008)	China's government	Literature review and documents	- The researchers believe that the budget reform does provide hope for China's anticorruption efforts, but it is not a panacea for anticorruption. - The budget reform reduces corruption, in the field of collecting, spending public monies and government regulations. - The effect of the budget reform on controlling corruption will contribute to the making of a clean government in China.
Tambulasi (2009)	Malawian local government	Interviews and Literature	- It found that NPM reforms in Malawi have led to increased levels of corruption. - It is feared that this situation could have massive negative impacts on economic development.

Aragon and Casas (2009)	Peruvian Municipalities	Literature review and documents	- This paper found evidence that lack of investment-related skills such as project management, accounting and finance, planning and coordination hinder the ability of local governments to increase public investment even when the financial resources were available. - The fiscal decentralization in Peruvian Municipalities involves revenue transfers to sub-national governments with the explicit mandate of increasing local spending. - This paper suggests that this objective may not be fully achieved due to skill shortages. In turn, local inability to increase spending may reduce the political support for the decentralization process.
Ma (2009a)	China	Literature review	- This study contributes to understand the complexities and dynamics involved in the development of accountability. - This study concluded that the existence of elections alone cannot ensure accountability and budgetary controls. - The study found that the Chinese experience shows, the lack of electoral accountability has limited the achievements of financial accountability. - Accountability is not just for non-elected regimes but also for democratic regimes to regulate the use of power.
Ma (2009b)	China	Literature review	- This study confirms that the capacity to budget matters in the attempt to strengthen state capacity. - This study concluded that state government should develop a well-functioning budgeting system for consolidating revenues and expenditure efficiently to achieve policy goals and to meet the needs of citizens. - The Chinese state seeks the capacity to budget in the absence of a well controlled budgeting system, it is critical that the state first institutionalises basic budgetary controls in the raising and deployment of financial resources. - This study found that when regularities and discipline into the governing process and budgetary process will make well prepared in China and headway towards a more advanced budgetary system such as the NPB. - The Chinese experience, can inform some other developing countries facing similar challenges as those China is now facing. - The Chinese experiences will serve to re-confirm the validity of the 'budgetary basics', are a necessary condition rather than a sufficient condition for implementing a performance budgeting.

Alkaleb (2009)	United Arab Emirates	qualitative research	- Traditional approach for budget preparation is focused on the inputs only, and this approach did not provide decision makers with sufficient information that enables them to determine spending priorities and to make optimum use of public funds. - The UAE government shifted planning and budget preparation from traditional approach to the application of planning programming budgeting approach.
Al-Akra *et al.* (2009)	Jordan public sector	Literature review and documents	- Accounting was practiced in the region as early as the Islamic state in the 8th century. - Political and economic factors which led to privatization had an influential impact on Jordan's accounting practices. - Privatization has significantly influenced Jordan's legal system, prompting the government to improve legal investor protection and enact the new disclosure regulations which significantly improve its disclosure quality. - Taxation, and accounting and auditing education in Jordan might act as a deterrent to the successful implementation International Accounting Standards/International Financial Reporting Standards.
Ramadhan (2009)	Bahraini governmental units	Questionnaire survey, structured and unstructured interviews and archival document	- The results of this study stated that budgetary accounting is the most important component of the accounting system in the government. - In budget preparation, the line-item budget, the modified cash basis, encumbrances, budgetary revisions, and emergency budgets are used. - The Minister of Finance is in the process of attempting to modernise the budgetary accounting and reporting system. The important administrative changes and major reforms have been specified in the Budget Law. - It is recommended that the accrual basis should be introduced. - The government aims to improve the overall efficiency, effectiveness, performance and accountability of the government organisations
Al-Dekhail (2010)	Saudi Arabian	archival document	- The improvements in Saudi municipalities' performance in the services are recommended. - The complete privatisation or partnership with the private sector is important to improve the Saudi municipalities' performance. - This paper referred to possible problems, including the complexity of regulations, central government control, and the lack of information available to the private sector of municipal services.

Saleh and Pendlebury (2010)	Malaysia	questionnaire survey	- There is a clear willingness to adopt the new public financial management of the UK. However one key difference between the two countries is that the UK government has now completed the lengthy switch to full accruals accounting and budgeting for all aspects of government activity. - Malaysia has focused primarily on management accounting initiatives for the development of governmental accounting. - Malaysian government is considered the use of accruals accounting in an attempt to improve its financial management procedures. - This survey of Malaysian government accountants reveals that although the current accounting and reporting system was generally felt to have been able to meet its main objectives there was also a clearly felt need for improvements including a move to accruals accounting.
Tooley *et al.* (2010)	Malaysia	Qualitative research	- There is an interest of stakeholders in local authorities in order to meet the information demands of public sector accountability. - The information for both the existing financial position and performance and future plans and future performance targets are important. - The performance report included quantitative and qualitative information (financial and non-financial information) of local authorities' performance.
Iyoha and Oyerinde (2010)	Nigerian government	Literature Review and document analysis	- The required level of accountability in public expenditure has not been achieved in Nigeria due in part, to the weak accounting. - The weak in accountability has culminated in annual budget indiscipline and high level corruption of the government sector. - There have been some initiatives by the government to prevent indiscipline in public expenditure by strengthening existing institutions with responsibility for controls.
Siddiquee (2010)	Malaysia	Literature Review	- Malaysia has followed the global trend by introducing results-based management in public governance, evidence shows that the implementation of the new approach is far from satisfactory. - The paper argues that while personnel management and budgetary reforms have helped overcome many of the anomalies of the traditional approach, the current practice in these areas continues to suffer from major inadequacies and limitations.

As observed, the research in the transitional economies has mainly been carried out in some developing countries, while no evidence was found of any study being conducted in the Arab Maghreb Union area (Libya, Tunisia, Algeria, Morocco and Mauritania). Correspondingly, this current study aims to bridge the gap by examining the current practices of management accounting techniques determining the change in management accounting practices in the developing economy of Libya, which has experienced a huge reform from a centrally-controlled to a market-based system and has the distinctive characteristic of being heavily reliant on the oil industry as the main resource for the economy. Furthermore, this study examines the influence of other factors that may have a potential impact on management accounting practices in this research context.

3-11 Summary

Management accounting has a significant role to play in the achievement of accountability, providing appropriate techniques, such as planning, budgeting and control in order to assist both internal and external entities with their decision-making processes. This chapter explained the definitions of management accounting in planning, budgeting and control. It also dealt with management accounting practice in local government, although explored its fundamental role of management accounting in both public sector and private organisations and essential differences between these sectors. In addition, some aspects were summarised in this chapter such as planning and budgeting, strategic planning, annual budget, capital budget, measurement and reporting and accountability. Budget preparation, budgetary control and performance evaluation were analysed in more depth because they are related to the objectives of the current study. This chapter presented the various arguments and presented a review of management accounting techniques, in developing countries. Through an analysis of academic literature this study also has outlined how accounting techniques are practiced, and consistent in the developing countries however, the centralized decision making model was found to be inadequate in sustaining a viable public management accounting system as the underlying political system to consolidate such a system and has not been fully developed in most developing countries. As a result, it can be argued that under-utilisation of natural resources, misappropriation and mismanagement of public funds, lack of accountability and inability to manage resources.

Chapter Four

Chapter Four

Data collection and Research Methodology

4-1 Introduction

This study aims to examine the current practices of management accounting techniques within the LPCMs. The purpose of this chapter is to discuss and justify the research design and methodology that was utilised in this study in order to collect data and achieve the research objectives. Therefore the following sections discuss and highlight the aims of the research, the research questions, research methodology, the rationale behind the decision making process used in developing the research methodology for this study, sample identification and selection, and the data collection methods. In this regard this chapter presents the questionnaire and interview methods, administration, design and structure, and pilot study rationale and processes. The distribution and response rate of the research methods are discussed along with a review of the internal reliability.

4-2 The research aims and objectives

The primary aims of the study are:

- To explore and examine the current practices of management accounting techniques within LPCMs and their role in providing information for planning, control, decision making and performance evaluation.

- To analyse the selected factors that may have affected those practices, especially after the final lifting of UN sanctions on Libya.

The objectives of the study can be outlined as follows:

1) To examine the role of management accounting practices in LPCMs through:-
   - Investigating the current practices of budget preparation in LPCMs.
   - Analysing the extent of use of budgetary control information in LPCMs.
   - Assessing the extent of use of performance measurement methods in LPCMs.
   - Examining medium and long-term financial planning in LPCMs

2) To evaluate the factors that might have an impact on the management accounting practices in LPCMs.

This objective will investigate the importance of eleven factors which are selected by a focus group of 12 Libyan PhD accounting students at Liverpool JMU and factors that emerged from previous studies such as Al-Dhowaihy, 2003; Ouda, 2003; Waweru *et al.*, 2004; Oliorilanto, 2008. These factors are: high level management support, management accounting training programmes, motivation systems, financial resources for accounting development, the use of computer systems for management accounting purposes, accounting research in Libya, professional accounting bodies in Libya, accounting education in Libya, co-operation between universities and LPCMs, economic changes, and policy of government. This objective will assess the importance of these factors on management accounting practices in LPCMs, through participants' views and other studies in developing countries.

3) To determine strengths and weaknesses of the current practices of management accounting techniques in use in LPCMs.

Some previous related studies conducted in developing and developed countries identified the strengths and weaknesses of the management accounting practices of the public sector. This investigation will enable the effectiveness of management accounting techniques to be evaluated and thus, this objective will be an opportunity for improving the current practice through identifying the shortcomings and strengths of these practices based on participants' views and previous related studies.

4-3 The research questions

To achieve these objectives some research questions were derived from suggestions made by a focus group of 12 Libyan PhD accounting students at Liverpool JMU, who have knowledge of accounting in the Libyan business environment. Some were derived from prior related studies in developing countries such as Al-Dhowaihy, 2003; Ouda, 2003; Waweru *et al.*, 2004; Oliorilanto, 2008. Consequently, the research attempts to answer the following research questions:

1. What is the role of management accounting techniques in use by LPCMs?
    a. What is the process of budget preparation in LPCMs?
    b. To what extent do the management accounting techniques in LPCMs provide budgetary control information?
    c. To what extent are performance measurements used in the LPCMs?
    d. To what extent do LPCMs prepare medium and long-term financial plans?

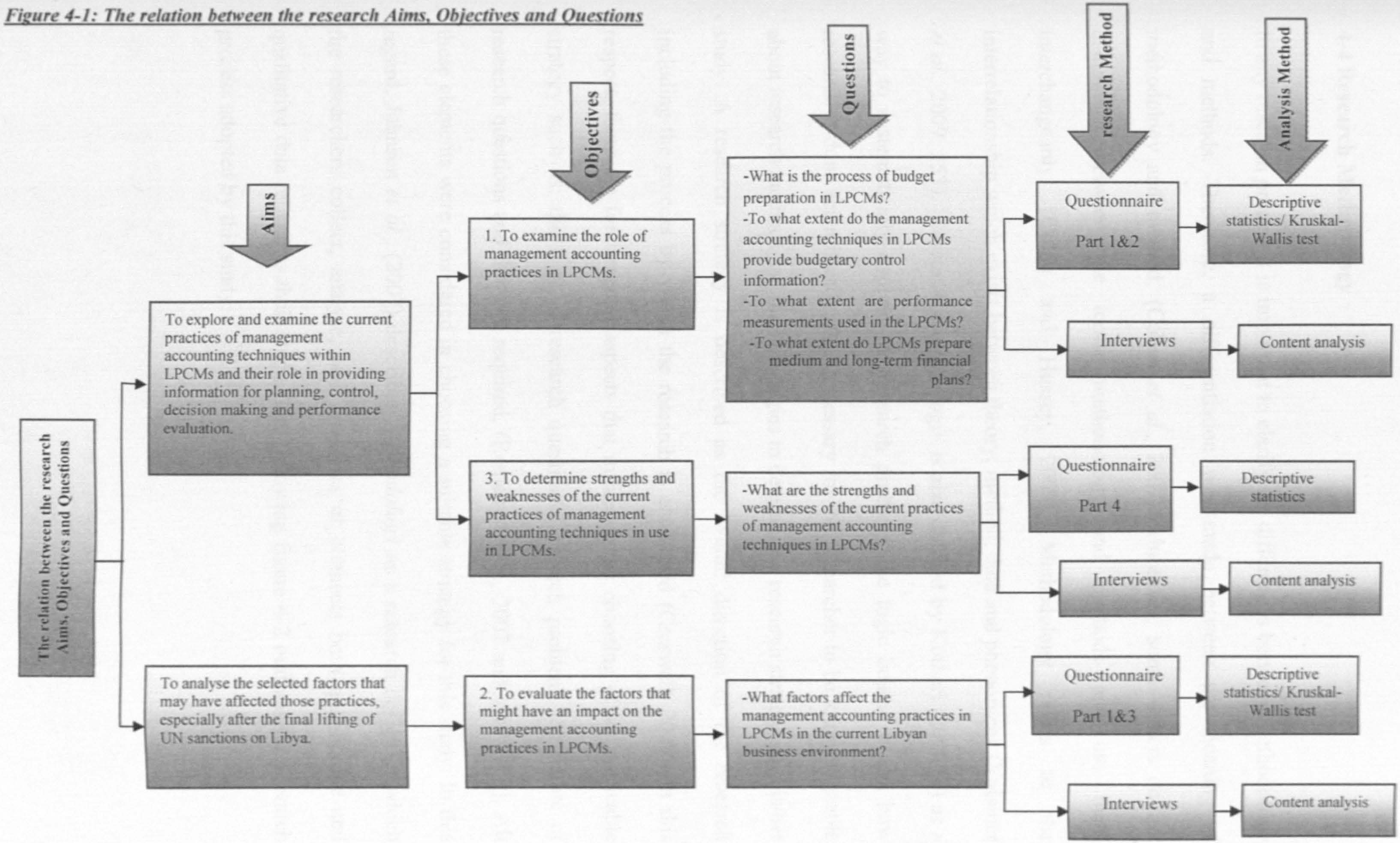
2. What factors affect the management accounting practices in LPCMs in the current Libyan business environment?

3. Are there any differences between the attitudes of financial managers, financial controllers and managers of services and projects in LPCMs towards the current practices of management accounting techniques used by their PCMs?

4. What are the strengths and weaknesses of the current practices of management accounting techniques in LPCMs?

Therefore, the relation between the research aims objectives and questions of this study are illustrated along with their analysis method in figure 4-1.

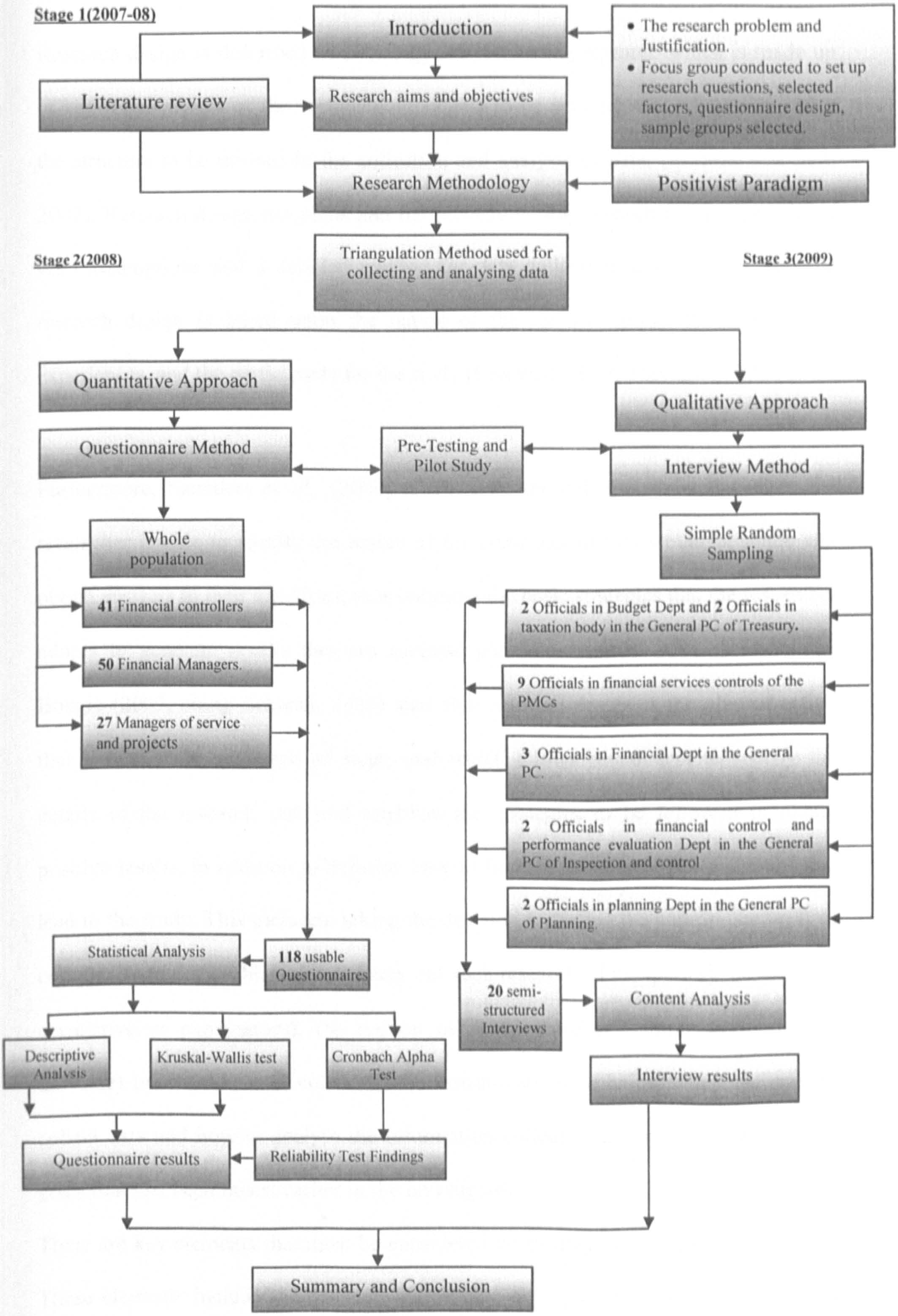
Figure 4-1: The relation between the research Aims, Objectives and Questions



4-4 Research Methodology

In any research process it is important to clarify the differences between methodology and methods. Therefore, a differentiation was made between the meaning of methodology and method, (Cohen *et al.*, 2007). Moreover, some writers do not distinguish between the terms methodology and methods and use them interchangeably, (Collis and Hussey, 2009). Methodology refers to the interrelationship which exists between theory, method, data and phenomena (Valsiner *et al.*, 2009: 353). '*Research Methodology*' is also defined by Kothari (2008: 8) as a way to systematically explain the research problem, the logic behind it and how research is done scientifically. It is necessary for the researcher to be knowledgeable about research methods and methodologies to determine a research strategy for his/her study. A research strategy is described as the overall direction of the research including the process by which the research is conducted (Creswell, 2009). In this respect, there are fundamental aspects that influence the choosing of an applicable strategy such as: the type of research questions, research problem, the nature of research questions and the data required, (Remenyi *et al.*, 2002 and Yin, 2009). All these elements were considered in choosing a suitable strategy for this study. In this regard, Johnson *et al.*, (2007) describes *Methodology* as a research design in which the researchers collect, analyse, and integrates or connects both quantitative and qualitative data related to their study. The following figure 4-2 outlines the research process adopted by this study.

Figure 4-2: The research process



4-4-1 Research design

Research design is described as a strategy for conducting research which is made up of key requirements of the various components to be investigated. Also, it specifies the structure to be utilised in the collection and analysis of data, (Bryman and Bell, 2007). Research design are plans and the procedures for research that are concerned with assumptions and a detailed method for data collection and analysis, also the research design is based upon the nature of the research issue, the researchers' experiences, and the participants for the study (Creswell, 2009; Thomas, 2009).

Furthermore, Saunders *et al.*, (2007) affirm that, through the research design, the researcher is able to specify the nature of the comparisons that would be made and obtain answers to their questions, thus outlining the basic strategies that the researcher adopts to generate results that are accurate and interpretable. Also, Sekaran and Bougie (2009, citing Sekaran, 2003) state that research design is the plan of action that indicates the sequence of steps, and which allows researchers to specify the details of the research task and establish the strategies to be followed to obtain positive results, in addition to defining how to find the answers to the questions that lead to the study. This includes: taking the decision regarding the appropriate level of complexity to our problem, i.e. to carry out such research (if exploratory, descriptive, correlative or explanatory), the portion of the population (sample or the whole universe) in which data is collected, the instruments or techniques that are used to collect data and how to analyse the information collected to respond to the specific goals that had been raised earlier in the investigation.

There are key elements that must be considered when undertaking a research design. These elements include the research philosophy, strategies of inquiry, and research methods (Creswell, 2009). Accordingly, considering the research philosophy is important element during the research design process for this study.

4-4-2 Research Philosophy and Approaches

4-4-2-1 Research Philosophy

The research philosophy is the most important element to be considered in the research design process. Research philosophy is identified by different authors such as research *'paradigms'*, *'epistemologies* and *ontologies'*, and *'philosophical worldviews'* (Creswell, 2009). In this regard, there is a relationship between the paradigms of scientific investigation and the suitable design / approach to be utilised in achieving the objectives of the research study (Creswell, 2003; 2009). Through the research paradigm, the researcher is able to clearly determine a design strategy that is appropriate for the questions which were raised by the researcher and will identify the key components of the research study such as the approaches to be utilised in the context of the study and the methods for data collection and analysis. Consequently, understanding a research philosophy will enrich the researcher's grasp of scientific knowledge and how this can be applied in the field of study to improve the accuracy of their research (Saunders *et al.*, 2007).

Easterby-Smith *et al.,* (2002) assert that there are three main advantages for any researcher in having an established research philosophy. With an established philosophy the researcher is assisted in determining the design, identifying an appropriate design for their study's contextual requirements while increasing their knowledge and experience of research materials and theories that are both within and outside their field of expertise

4-4-2-1-1 phenomenology

Phenomenology is a part of a paradigm that analyses and studies the phenomena thrown into the consciousness, that is, the essences of things which are in stark contrast to the precision of the measurement procedures as espoused by the positivist paradigm (Collis and Hussey, 2009). In other words, phenomenology is the science that studies the relationship between facts (phenomena) and the area in which this reality is. The phenomenology of consciousness is concerned with all forms of experiences and events that seek answers to questions such as what, why and how, (Hussey and Hussey, 1997; Collis and Hussey, 2009). Therefore, the phenomenology is concerned with the nature of social phenomena as entities, (Saunders *et al.*, 2007). Easterby-Smith *et al.*, (2002) point out that phenomenological (social constructionism or interpretivism) paradigm has an important part to play in business and management research. Remenyi *et al.* (2002: 95) state that:

> *"Interpretivism is a theoretical point of view that advocates the study of direct experience taken at face value; and one which sees behaviour as determined by the phenomena of experience rather than by external, objective and physically described reality."*

In this regard, it is important that real-life problems that are used by the phenomenological paradigm are in tandem with at least an emerging understanding of the literature (Remenyi *et al.*, 2002).

The phenomenological paradigm to research is not reductionist but holistic and allows much more complicated situations to be examined. It aims to focus on the context of the study (Denscombe, 2007). In addition, the phenomenological paradigm refers to a philosophical paradigm for conducting qualitative research that highlight people's subjective experiences (Rubin and Babbie, 2009). Therefore, part of the context of the research study is the nature of the research and the characteristics of the setting. This paradigm achieves approximately the same results researched by positivists (Remenyi *et al.*, 2002).

4-4-2-1-2 Positivism

This paradigm sometimes called traditional, quantitative research, empirical science and positivism, (Creswell, 2009).

According to Remenyi *et al.*, (2002) the positivist paradigm seeks to shape theory through empirical studies. With the positivistic paradigm, the researcher develops assumptions about the correlation between two or more variables through utilising research studies / literature. And then, significant relationships between the variables are then sought through empirical gathering of data on the variables for investigation which is then statistically tested. Consequently, the basic perspective on the positivistic paradigm is that the scientific method is one and the same in all fields of knowledge, so that the unity of all science is based on the method. As a result, we can indicate, according to Remenyi *et al.*, (2002), that positivists seek the facts and causes of social phenomena regardless of the subjective states of individuals.

Saunders *et al.*, (2007) argue that positivism relates to the natural sciences. This entails working with an observable social reality and the end product can be law-like generalizations similar to those in the physical and natural sciences. The key aim of the positivistic researcher is to generalise the findings to the larger population (Saunders *et al.*, 2009).

Table 4-1 outlines the main differences between phenomenology and positivism that are related to the chosen research approaches adopted in the context of this study.

Table 4-1: Contrasting implications of positivism and phenomenology

Source: Easterby-Smith et al. (20002: 30)

Several terms have been used in describing research paradigms. Table 4-2 summarises the most common terms for the main research paradigms.

Table 4-2 Alternative terms for the research paradigms

Source: Hussey and Hussey (1997: 47)

According to Saunders *et al.,* (2009), research paradigm revolves around two paradigms of research the phenomenology and positivism of thought that are critical in the research of business and management studies. In this regard, not all research within management accounting in the public sector adopts a positivist paradigm, but the majority of the previous studies adopt this paradigm. Table 4-3 summarises the management accounting studies within the public sector used the positivist paradigm.

Table 4-3 Management accounting studies within public sector used the positivist paradigm

Author(s)	Research Philosophy	Methodology(s)	Method(s)
Polidano (1999)	Positivist paradigm	Questionnaire survey	Descriptive statistics
Almohaimeed (2000)	Positivist paradigm	Positivist paradigm	Descriptive statistics
Al-Dhowaihy (2003)	Positivist paradigm	Questionnaire survey and interviews	Descriptive statistics / Kruskal-Wallis test/ content analysis
Waweru et al. (2004)	Positivist paradigm	Questionnaire survey and interviews	Descriptive statistics / content analysis
Curristine and Bas (2007)	Positivist paradigm	Questionnaire survey	Descriptive statistics
Ramadhan (2009)	Positivist paradigm	Questionnaire survey and interviews	Descriptive statistics / content analysis
Saleh and Pendlebury (2010)	Positivist paradigm	Positivist paradigm	Descriptive statistics

In general, determining the most applicable philosophy is discussed between researchers (Easterby-Smith *et al.*, 2008). Therefore, understanding the strengths and weaknesses of both paradigms provides the researchers with insightful aspects to their research situation. Examples of the strengths and weaknesses of the quantitative and qualitative paradigms are presented in Table 4-4.

Table 4-4 Strengths and weaknesses of Positivist and Phenomenological paradigms

Source: Amaratunga et al., (2002: 20)

Consequently, the rationale behind adopted a positivistic paradigm in this study is summarised as follows:

- The dominant paradigm according to Yin (2009) for business research is the positivistic paradigm. Collis and Hussy (2003) advise that with this paradigm the researcher is utilising an established and acceptable approach in the research discipline area.

- The positivistic paradigm is chosen according to the current knowledge of the research topic under investigation, in line with the research objectives of this study (Hussey and Hussey, 1997).

- The research adopted a positivist paradigm through the use of a large sample size to investigate the current practice of management accounting techniques in LPCMs and the factors that may have an impact on the application of these techniques. The main method used to achieve these objectives is questionnaire which is characteristic of positivist approach. The testing of research questions gives credence to the employment of this methodology, which is a key feature of the positivist approach.

- The researcher's position in the study would be as an observer who is independent and this fits with the paradigm which requires the observer to be value free while focusing on the facts (Remenyi *et al.*, 2002).

- With the recent political and economic structural changes in Libya, there had been anecdotal evidence within the General PC of Treasury which suggests that there are new challenges for General Financial Controllers working in public sector agencies and the positivistic paradigm provides an approach which enables the researcher to reduce phenomena into its simplest elements. This approach was selected for the Libyan context, where phenomena of the recent economic and political changes and their impact on the management accounting practices could be identified in an accurate way.

- The positivistic paradigm was used as the main approach methodology by similar previous studies in developing countries such as Polidano (1999); Almohaimeed (2000); Al-Dhowaihy (2003); Waweru et al. (2004); Curristine and Bas (2007); Ramadhan (2009) and Saleh and Pendlebury (2010) (see Table 4-2). By utilising a similar approach, the researcher intends to make use of previous studies and extend the knowledge on the current management accounting practices in Libya.

Altinay and Paraskevas (2009) indicate that the deductive approach represents the positivistic paradigm, where the inductive approach represents the phenomenological paradigm. According to Bryman and Bell (2007) the positivism paradigm entails elements of both a deductive approach and an inductive approach.

4-4-2-2 Deduction and Induction

Deduction and induction present two alternative ways or stages of building theories. Theories based on deductive and inductive approaches help to understand, explain, and predict business phenomena (Sekaran, 2003). The inductive approach is the process of observing data to generate a theory (Ghauri and Gronhaug, 2005).

Rubin and Babbie, (2009: 39-40) concluded that theories can influence the research process using either inductive or deductive approaches;

> *''An inductive approach is a research process based on inductive logic, in which the researcher begins with observations, seeks patterns in those observations, and generates tentative conclusions from those patterns. A deductive approach is a research process based on deductive logic, in which the research begins with a theory, then derives hypotheses, and ultimately collects observations to test the hypotheses.''*

While, in contrast to the inductive approach, the deductive approach involves the gathering of facts to confirm or reject hypothesized relationships between variables that have been deduced from existing knowledge. Therefore, deductive research starts with the existing theories and concepts, and formulates hypotheses that are later tested with the help of empirical data, on the other hand inductive research starts with the empirical data, and the result is the emergence of concepts, models, and eventually theories (Gummesson, 2000).

More specifically, deduction is based on the interpretation of the meaning of the results of data analysis by logical generalization of known fact, whereas in induction, the focus is on a general proposition based on observed facts, (Sekaran, 2003). Furthermore, Saunders *et al.,* (2009) indicate that the deductive approach is used with the literature to help develop theories and hypotheses that she/he will test using data. Whereas, the inductive approach to research collects data and develops theories as a result of data analysis. Thus, deductive research is referred to as moving from the more general to the more specific and inductive research is referred to as moving from the general to the specific, (Collis and Hussey, 2009). Saunders *et al.*, (2009) summarise the main differences between deductive and inductive approaches to research in Table 4-5 as follows:

Table 4-5: Main differences between deductive and inductive approaches

Source: Saunders et al., (2009: 127)

There are a number of international studies of government accounting which employ a comparative approach accompanied by a descriptive explanation of similarities and differences in this type of accounting (Chan, 2000). Saunders *et al.*, (2009) state that the descriptive research used for achieving a clear picture of the phenomena which might be examined. Sekaran (2000) points out that the aim of descriptive studies is to supply a description of phenomena which will be studied from an individual, organisational, or other perspective. According to De Vaus (2001) descriptive studies tend to answer the question: '*What is going on?*'. This study will explain the current practices of management accounting techniques in LPCMs. Consequently, this study would be descriptive due to the lack of published reports on management accounting system of LPCMs and, the deductive approach will be used in this study.

Saleh (2007) recommends that further research to assess the changes in the accounting in developing countries' governments be undertaken. In an in-depth study of Libyan accounting research, Ahmad and Gao (2004) conclude that more accounting research in Libya was needed. This study is an attempt to fill in this gap given the major role that LPCMs play in Libyan local government.

4-4-2-3 Research Approach

Creswell (2003) states that there are three approaches that the research methodology can be derived from: quantitative, qualitative or a mixed methods approach. The first two approaches can be classified into two main categories: either positivistic or phenomenological approach, respectively. Punch (2000) concludes that the distinction between qualitative and quantitative approaches is important in social research and a basic principle in research methods.

Saunders *et al.*, (2009) point out that the main difference between qualitative and quantitative research is the nature of data used and the results. While the qualitative research approach is concerned with the perceptions of individuals while the quantitative approach uses statistical methods for the interpretation of numerical data both approaches according to Easterby-Smith *et al.*, (2008) may be used with a positivistic paradigm. Creswell (2009) states that the strategies knowledge claims and methods all contribute to three approaches to research. These approaches are quantitative, qualitative and mixed methods. The following are the definitions for each approach that have been identified by Creswell (2003; 2009):

- A quantitative approach is one in which the investigator primarily uses '*post-positivist*' claims for developing knowledge, utilises strategies of inquiry such as experiments and gathers data on prearranged instruments that yield statistical data.

- A qualitative approach is one in which the inquirer makes knowledge claims based on constructivist perspectives for developing knowledge, utilises strategies such as the researcher gathers open-ended data and initial data with the primary intent of developing themes from the data.

- A mixed approach is one in which the researcher tends to base knowledge claims, utilises strategies and gathers data. The final database represents both quantitative and qualitative information.

Creswell (2003) and Saunders *et al.*, (2009) suggest several criteria to determine the suitable research approach to adopt. Based on these criteria the most important of these are:

1- The research topic. According to this criterion, a topic with a wealth of literature that helps in developing a theoretical framework and hypotheses leads to adopting the/quantitative/deductive approach. However, it may be more appropriate to adopt the qualitative/inductive approach for research into a new topic with little existing literature.

2- Time available for the research. The quantitative research can be quicker to complete. On the other hand, qualitative research can be much more protracted. Therefore, the former approach can be a lower-risk strategy than the latter approach.

3- Respondent preferences. Most managers are familiar with the quantitative approach and more likely to put faith in conclusions resulting from this approach.

Therefore, these criteria were used to determine the appropriate research approach of this study.

Ary *et al.*, (2009) provide the distinction between qualitative and quantitative approaches which can be summarized in Table 4-6.

Table 4-6 The distinction between qualitative and quantitative approaches

Source: Ary et al., (2009: 25)

4-4-2-3-1 Quantitative approach

The quantitative approach provides the researcher with some advantages. Patton (2002) indicates that this approach facilitates the measurement of the reaction that a limited number of questions produce and enables data collection and comparison to be simplified. Due to the historical emphasis for this approach according to Moore (2000) the techniques used with this approach are more sophisticated in nature. The use of the qualitative approaches facilitates the researcher to measure what is actually happening (Easterby-Smith *et al.*, 2008), while also providing an approach that enables people's beliefs and attitudes to be measured (Moore, 2000). In the Libyan context this approach assists the researcher to access participants who, due to cultural barriers are reluctant to participate in a qualitative research process. On the other hand, the quantitative approach has some disadvantages such as:

- The quantitative approach is seen as an increasingly inadequate method, especially in cross-cultural research, (Lee, 1992).
- A quantitative approach confines experience by directing research to what is perceived by the senses, (Robson, 2002).
- A quantitative approach restricts experience by adopting only standardised instruments, based on quantifiable data, to test hypotheses, (Robson, 2002).

4-4-2-3-2 Qualitative Approach

A qualitative approach includes examining and reflecting on the research participants' perceptions to gather an understanding of the rationale for their workplace activities (Easterby-Smith *et al.*, 2008).

The qualitative approach has some advantages such as:

- A qualitative approach concerns what people think, what happens and why, (Arksey and Knight, 1999).
- The qualitative approach leads with data that represent words or pictures rather than numbers and statistics, (Ary *et al.*, 2009).
- The employment of the qualitative approach is about developing and understanding of the individual's views, attitudes and behaviour, (Moore, 2000).
- Researchers who are using the qualitative approach see themselves as producing data which is rich and deep, (Tombs, 1995).
- Using qualitative methods can supply enhanced understanding of the phenomenon about which little is yet known, (Easterby-Smith *et al.*, 2008).

Some of the disadvantages for the qualitative approach include the researcher's perception of the situation when they are collecting the data and interpreting it. The researcher according to Patton (2002) is the instrument of both data collection and data interpretation. There is some criticism of the validity of using the qualitative approach due to the interpretive nature of the research and the scarcity of defined analytical methods (Easterby-Smith *et al.*, 2008).

The use of qualitative methods is consistent with this perspective. Denzin and Lincoln (2005:3) who state that:

> *"Qualitative research is an n activity that locates the observer in the world. It consists of a set of interpretive, practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to the self At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them".*

In the light of the discussion above, positivism is a common approach employed in management accounting research. However, regarding this study, the choice of research philosophy is made in line with prior studies and is linked to the research objectives. To achieve the research purposes, a mixed approach was employed.

-**The first step** of the research employed a positivist/quantitative approach through the use of a large scale survey to explore and examine the current practices of management accounting techniques, and analyse several factors that may have affected those practices, especially after the final lifting of UN sanctions on Libya. In addition, the work experience of researcher is from the government sector in Libya and may influence his interpretation and analysis of findings, therefore, adoption of the positivist approach will give validity and credibility to the research.

-**The second step** of the research applied a qualitative approach in order to clarify and confirm the findings which come from the first step of the research. This was achieved through the analysis of findings from semi-structured interviews with officials in Libyan government bodies coupled with the use of the researcher's own observations and knowledge of the government sector. This reflects the qualitative approach, given the small sample size, and in-depth analysis of collection data.

4-4-2-3-3 Triangulation

Triangulation refers to the use of multiple different research techniques and multiple sources of data within the same study in order to ensure that the data are telling you what you think they are telling you, (Saunders *et al.*, 2007). Creswell and Clark (2007: 18) indicate that:

"Triangulation research is important today because of the complexity of problems that need to be addressed, the rise of interest in qualitative research, and the practical need to gather multiple forms of data for diverse audiences".

The combination of two or more methods of data collection is advocated by researchers as valuable in allowing the process of triangulation, which essentially gives more credence to the results obtained (Bryman, 2004). In this respect, Easterby-Smith *et al.*, (2008; Saunders *et al.*, 2009) note the benefit of collecting both quantitative and qualitative data in an attempt to triangulate findings, suggesting this to be an advantage for any research project. In this regard, Lee and Humphrey (2006) indicate that quantitative and qualitative approaches should be equally used in organisational research as it provides an opportunity for triangulation. Saunders *et al.*, (2009) state that the nature of the research topic is the most important criterion when choosing which research approach should be employed. In business research, the term '*triangulation*' refers to gathering information from multiple sources which is analysed to ensure that a biased view is not being obtained from one informant (Saunders *et al.*, 2009). Helden (2005) indicates many studies of management accounting have used questionnaires and interview methods to achieve their objectives.

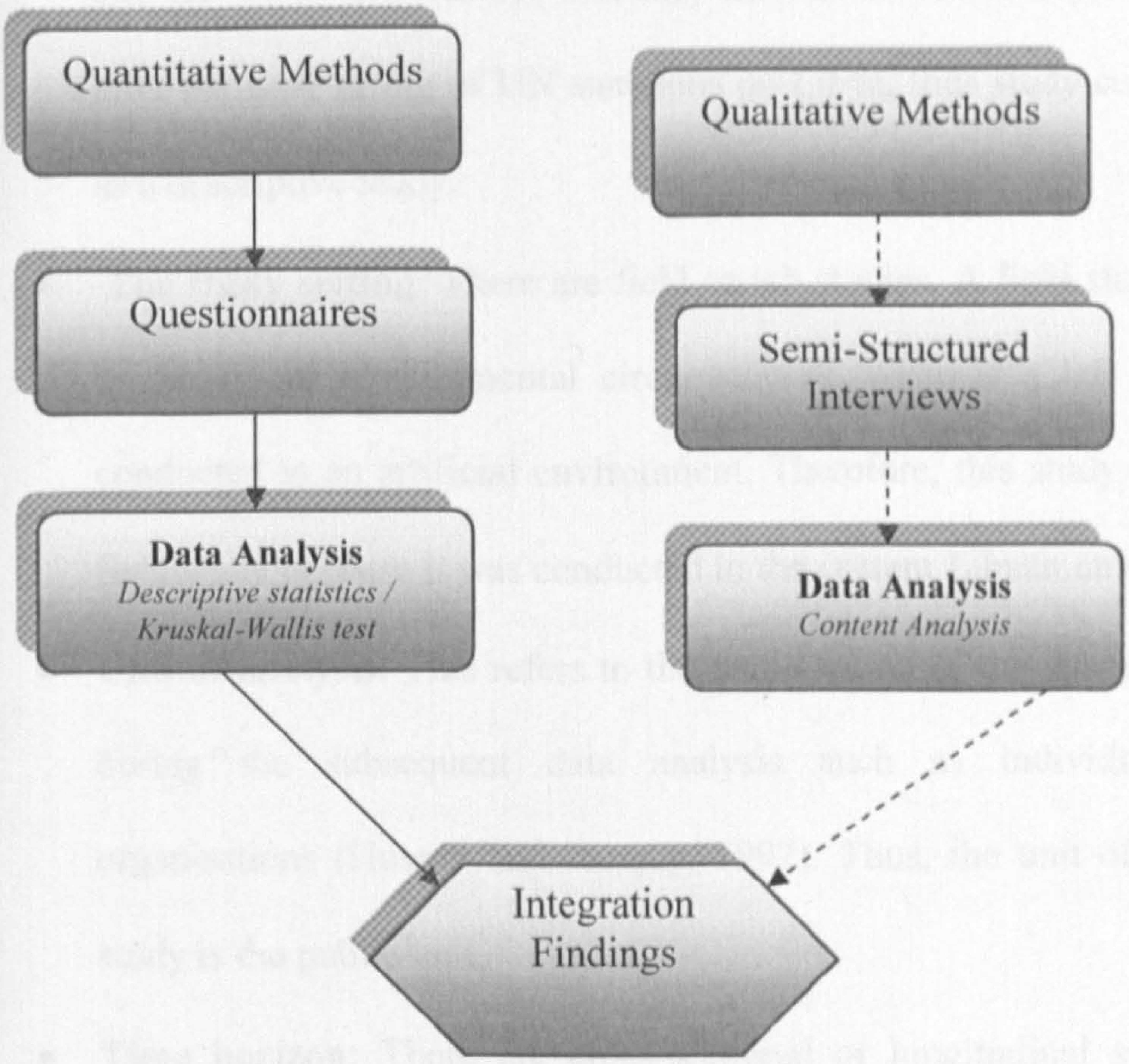
For the purpose of this study, the fundamental reasons for using triangulation (qualitative and quantitative methods) (see Figure 4-3) are:

- To provide a comprehensive understanding of the situation, to support the findings of the quantitative method.
- To reduce risk of bias and to identify if there was any additional influence that impacted on the study that was not covered by the quantitative method.

- To enhance the results of this study and by obtaining in-depth information from the respondents.
- The use of quantitative and qualitative measures serves as a means of triangulating the results of the study.

The data was collected initially through a thorough review of the literature, then from questionnaires were distributed among Financial Managers, Financial Controllers and Managers of Services and Projects in LPCMs (see section 4-6-1-4-1) and finally from semi-structured interviews were conducted with officials of Libyan governmental bodies which have a strong relationship with LPCMs to get their perceptions and attitudes towards the current practices of management accounting techniques in LPCMs, and identify to what extent results differ. All the interviewees who participated in the semi-structured interviews have more than 5 years' work experience. The nine interviewees are key officials in financial services control within the LPCMs were selected randomly out of the 34 LPCMs, three officials of General Libyan PC (Cabinet), two officials of budget department and two officials of taxation body in General PC of Treasury (Ministry of Treasury), two officials of the planning department in General PC of Planning (Ministry of Planning), and two officials of Financial Control and Performance Evaluation Department of Public Sectors in General PC of Inspection and Control (General Audit Bureau) (see section 4-6-2-1).

Figure 4-3: The structure of triangulation approach for this research



4-5 Research Design

From the above sections, the researcher using a specific research design. The selection of appropriate techniques in research relies on how the researcher selects a proper design. In this regard Sekaran (2003) state that there are several phases of research design summarised as follows:

- **Purposes of the study**: This can be categorized into two types: descriptive and hypotheses testing. While the key aim of descriptive studies is to describe the characteristics of the variables, the aim of hypothesis testing is to explain the nature of some relationships. However, the main aims are to explore and examine the current practices of management accounting techniques, and to analyse the several factors that may have affected those practices, especially after the final lifting of UN sanctions on Libya, thus study could be classified as a descriptive study.

- **The study setting:** There are field or lab studies. A field study is carried out in the actual environmental circumstances, whereas a lab study is usually conducted in an artificial environment. Therefore, this study is classified as a field study because it was conducted in the current Libyan environment.
- **Unit of analysis:** This refers to the combination of the data sources collected during the subsequent data analysis such as individuals, groups or organisations (Hussey and Hussey, 1997). Thus, the unit of analysis of this study is the public unit.
- **Time horizon:** There are cross-sectional or longitudinal studies. Easterby-Smith et al., (2008) point out that the cross-sectional studies aim to collect data at one point in time which might be days or weeks and cross-sectional usually using a questionnaire survey method for collecting data, whereas in longitudinal studies, data are collected at more than one point in time, and uses observation and interviews. Therefore, this study could be classified as cross-sectional because it has been carried out at one point in time.

4-6 Data Collection Methods

There are various methods for conducting research into management accounting. These include: observation, interview and questionnaire depending upon the nature of the research topic (Saunders *et al.*, 2009). Saunders *et al.*, (2009) indicate that utilising various methods in research is very common, where the researchers adopt quantitative and qualitative methods and use both primary and secondary data. As mentioned in section 4-3 the key aims of this study are to explore and examine the current practices of management accounting techniques in LPCMs, and to analyse the selected factors that have affected those practices, especially after the final lifting of UN sanctions on Libya.

The research methods used in this study are: the questionnaire and semi-structured interviews. The two methods will utilise as complementary methods to ensure that the data obtained is valid and highlights the participant's views, to best understand the study's results and to reduce bias risk. In addition, utilizing those methods helps to provide comprehensive evidence for this study by adding interview responses to questionnaire responses and determines to what extent the results differ and to enhance the reliability of responses.

4-6-1 The Questionnaire Method

A questionnaire is the most efficient and important tool of data collection when the researcher knows what type of information is needed (Sekaran, 2003). Saunders *et al.*, (2009) considers questionnaires to be a general term that includes all data collection techniques that require participants to respond to the same set of questions in the same order.

Sekaran (2003:236) defines the questionnaire as:

> *"A preformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives".*

In this regard, Collis and Hussey (2009) define the questionnaire as a list of structured questions, chosen after substantial testing with a view to obtaining reliable responses from a chosen sample.

4-6-1-1 Types of Questionnaires

Rubin and Babbie (2009) advise that the three main types of questionnaires are the postal, web-based and self administered questionnaires. Table 4-7 summarises the differences between all types of questionnaires.

Table 4-7 The contrasts between all types of questionnaires

Source: Saunders et al., (2009), Rubin and Babbie (2009) and Wright and Marsden (2010)

4-6-1-2 Advantages of using a questionnaire

There are several advantages of a postal questionnaire in a research process, depending upon time, geographical location and limitation of the scope and extent to which this method of distribution can be used (Sekaran, 2003; Collis and Hussey, 2009). A number of the advantages are:

- The cost is low for a study of a large population. The use of a postal questionnaire survey is relatively cheaper than the interview when the participants are spread across a large geographical area and there are a large number of participants (Rubin and Babbie, 2009; Saunders *et al.*, 2009; Easterby-Smith *et al.*, 2008).
- The use of a questionnaire survey according to Saunders *et al.*, (2009) helps in maintaining the independence of the researcher within the research process. This is particularly true in postal surveys as the researcher is not present when the participant is completing the questionnaire and therefore cannot unduly bias the responses (Harrison, 2010).
- A questionnaire survey guarantees more anonymity to the participants, (Harrison, 2010).

4-6-1-3 Disadvantages of using a questionnaire

A questionnaire survey has some main disadvantages of using it in research such as:

- One of the main disadvantages particularly for a postal questionnaire survey is the low response rate (Wright and Marsden, 2010; Easterby-Smith *et al.*, 2008).
- Due to the independence of the participant the researcher is not available to clarify questions for the participant or to query the participant's response easily (Harrison, 2010; Saunders *et al.*, 2009).

- Vardigan and Granda (2010) indicate that responses to questionnaires may not be in the depth required by the researcher.
- According to Harrison (2010) the psychology that affects the participant's perception of the questionnaire can affect their completion status for the questionnaire. Nock and Guterback (2010) advise that as the researcher is not present when postal questionnaire arrives at the participant's address it is easier for the participant to withdraw from the process.

The rationale behind choosing the postal or mail questionnaires method in this research as follows:

- The questionnaire is commonly used as a method of data collection in business research and it is simple to administer historically (Creswell, 2009; Saunders *et al.*, 2009).

- A potentially large sample of a targeted population in a large and different geographical area of Libya and the lack of transport infrastructure made the personal delivery of self administered questionnaires logistically and economically unfeasible for the researcher.

- Libya unlike the UK does not have the internet infrastructure and as a result not everyone in government organisations has access to internet enabled machines. Internet access within management is often restricted to upper management executives.

- The General PC of Treasury provided an opportunity to use the internal express postal service which reduced the costs for the researcher but also provided greater accessibility to the proposed participants than if the researcher had used the public postal service.

- The General PC of Treasury mail service was also able to identify who were the position holders within the LPCMs. Since the researcher had assistance from the General PC of Treasury, the questionnaire also provided a non-threatening approach for information and reduced the reluctance to participate.

- The support of the General PC of Treasury may have encouraged some respondents to participate as it came from an official source that relates to their daily activities. Harrison (2010) advises that if respondents receive research requests from government agencies about their workplace activities, they are more likely to respond.

- The method was also used in previous studies in similar areas of management accounting such as Almohaimeed (2000); Al-Dhowaihy (2003); Waweru et al. (2004); Curristine and Bas (2007); Ramadhan (2009).

- The questionnaire was appropriate to be consistent with the research paradigm adopted and to achieve the research objectives. Generalisation is possible identifying relationships between research variables and using the required test analysis techniques such as Kruskal-Wallis test (Collis and Hussey, 2003; Saunders *et al.*, 2009).

4-6-1-4 The questionnaire administration

The questionnaire survey was conducted with financial managers, financial controllers and managers of services and projects in LPCMs. In December 2008, the questionnaires were sent by the General PC of Treasury's express post service to LPCMs. Attached to the questionnaire were two letters. The first letter was from the researcher thanking and asking the participants to complete the questionnaire, explaining the objectives and significance of the research and assuring the participants that all their responses would be kept confidential. The second letter was from the Libyan Undersecretary for Higher Education asking for LPCMs' cooperation with this research request (see appendix A).

4-6-1-4-1 The study sample of questionnaire

Fink (2003) states that a sample is a portion or subset of a larger group called a population. The population is the universe to be sampled. LPCMs were selected as the field of this study since that they are agents of Libyan local government. Malhotra *et al.*,(2002) indicate that determining the sample size is complex and there are several qualitative and quantitative considerations such as:

- The importance of the decision.
- The nature of research.
- The number of variables.
- The nature of the analysis.
- The sample sizes used in similar studies.

- Incidence rates.
- Completion rates and resource constraints.

In this matter, Easterby-Smith *et al.*, (2008) stress that all the elements of a study population should be utilized by the researcher to develop a sampling frame which they draw their sample from but in the case where no such complete and accurate list is available, the researcher has to devise his own sampling frame. There is no agreement in the literature about the relevant sample size whereas researchers may recommend a minimum number of 30 for statistical analysis to provide useful and meaningful results, (Saunders *et al.*, 2009).

With the assistance of the General PC, a total of 34 LPCMs were identified in December 2007 as the organisations where the participant population were to be found. The main reasons for choosing LPCMs were their importance in the public sector as non-profit organisations seeking to provide services to the people and organisation in their geographical area, LPCMs are responsible for the development in the municipal areas of agriculture, industry, health, education and local services and the LPCMs are facing competition with internal and foreign investors after Libyan government allowed them to invest in this sector. This sector has become attractive for foreign and internal investors (for further information see chapter 1 section 1-2 and chapter 2 section 2-5). Within the 34 LPCMs there were three roles identified who were likely to be suitable respondents for the survey topic. The three roles that were identified are Financial Managers, Financial Controllers and Managers of Services and Project departments.

Financial managers deal with management accounting techniques in their work and they are responsible for financial and management accounting in LPCMs. While **Financial Controllers** represent the General PC of Treasury in LPCMs and have all authority regarding financial and management accounting as an external control. Financial Controllers deal with management accounting techniques and they are responsible for controlling and implementation of these techniques in LPCMs. The last group **Managers of Services and Projects** represent the spending centres in LPCMs, so they have some contribution to budget preparation and implementation in LPCMs.

Therefore, the reasons for choosing this sample group are that the literature of management accounting in Local government indicates that these targets are the main users and preparers of management accounting information in public sector generally and Local government in developing countries. In particular all prospective respondents selected were managers and had sufficient knowledge and experience of management accounting in LPCMs, and the targets have greater than 5 years work experience in the Civil Service meeting the requirements of *Law No 55 -1976* to hold a management position.

Originally when the study was first developing the sampling frame in 2007 there were 5 Financial Controllers for the different service areas within each LPCMs. This was in conjunction with the small numbers of individuals in the other two roles meant that the researcher had to survey all individuals that could be indentified to ensure that this sample had enough responses to allow statistical analysis. The numbers of the professionals available in the different roles within the LPCMs were reduced by 3 Financial Controllers in 2008 and it was fortunate that the whole of the population sampling process had been developed as if a selective sample had been used, the final number of participants would not have been enough to enable statistical analysis. This reorganisation of the structure of the LPCMs not only changed the number of Financial Controllers present in each municipality but, for 17 LCPMs, the Managers of Services and Projects were centralised back to Central Government and in some cases where there where two individuals in the role this was cut back to one individual being responsible for Services and Projects. The only group which did not change between the pilot study phase and the final study was the Financial Managers. The majority of the municipalities only have one Financial Manager except for 7 who due to the size of the population, have 2 Financial Managers for their municipality.

4-6-1-4-2 The questionnaire design

The questionnaire and questions were set by the focus group of 12 Libyan PhD accounting students at Liverpool JMU, who have enough knowledge of accounting in the Libyan business environment, and a few questions were improved by prior studies (Al-Dhowaihy, 2003; Ouda, 2003; Waweru *et al.*, 2004; Oliorilanto, 2008 and Ramadhan, 2009). The questionnaire was then translated into Arabic language by a legal interpreter who is an expert in business and accounting translation. From the translated questionnaire in the pilot study there were additional suggestions from 6 specialists in Libyan public sector management accounting field as well as further modification after the interviews with 6 public officials from various Libyan government bodies. The piloting stage helped in the clarification and simplification of the questionnaire and assisted with the ease of administration.

In this regard, Sekaran (2003) suggested that it is always necessary to consider each and every question in a survey questionnaire in order to ensure that the responses are valid and to avoid the bias risk. In this respect, Krosnick and Presser (2010) concluded the following guidelines for designing a questionnaire:

- Use simple, familiar words and understandable terminology. Avoid words with ambiguous meanings, in order for all respondents to interpret wording in the same way.
- Clear typography when printing the questionnaire.
- Strive for wording that is specific and concrete (as opposed to general and abstract).
- Make response options exhaustive and mutually exclusive. Avoid leading or loaded questions that lead respondents toward an answer.
- Ask about one thing at a time (avoid double-barrelled or multi-clausal questions) and avoid questions with single or double negations.
- Early questions should be easy to answer, and should build rapport between the respondent and the researcher.
- Questions at the very beginning of a questionnaire should explicitly address the topic of the survey and those questions should not be negative as negative statements may confuse the participants.
- Questions on the same topic should be grouped together to avoid biased questions where a biased question makes one response more likely than another.
- The questionnaire was tested in the pilot study.

These guidelines were used in the design of questionnaire. The questionnaire consisted of two kinds of questions: closed-ended and open-ended. Closed-ended questions supplied participants with options for an answer to obtain the relevant information. Open-ended questions allowed participants to express their opinions and supply more in-depth information. Closed and open-ended have advantages and disadvantages as follows.

4-6-1-4-2-1 Advantages and disadvantages of closed-ended questions

The use of closed-ended questions in questionnaire survey has advantages and disadvantages.

-The advantages of closed-ended questions

The use of Closed-ended questions help the respondents to answer the questions quickly and help the researcher to analyse information and compare the answers of questions from their respondents with those from other studies (Vardigan and Granda, 2010; Krosnick and Presser; 2010).

-The disadvantages of closed-ended questions

Such questions do not invite broad answers and may introduce bias. Closed-ended questions may not reflect respondents' views, and may have affected respondents' opinions by pushing the respondents to choose from only the provided answers, (Easterby-Smith *et al.*, 2008, Wood, 2008, Saunders *et al.*, 2009).

4-6-1-4-2-2 Advantages and disadvantages of open-ended questions

There are some advantages and disadvantages of using the open-ended questions outlined in the following:

-The advantages of open-ended questions

Open-ended questions allow respondents to give personal responses without the influence of the provided answers. It enables respondents to answer questions as accurately as possible. Such questions may sometimes provide more information by questionnaire and interviews, (Wood, 2008, Vardigan and Granda, 2010, Krosnick and Presser; 2010).

-The disadvantages of open-ended questions

The main disadvantage is that the questions are not easy to answer and analyse. Such questions need more time to answer (Easterby-Smith *et al.*, 2008, Wood, 2008, Saunders *et al.*, 2009, Vardigan and Granda, 2010).

4-6-1-4-3 The Rationale for Each Part of the Questionnaire

The questionnaire was divided into four parts to make the answering simpler for the respondents and aiding analysis by the researcher. The final version of the questionnaire is divided into four parts; the first part included the personal and background information of participants, while the second was designed to examine the role of management accounting practices in LPCMs; the third part was designed to explore and evaluate the factors that have an impact on the management accounting practices in LPCMs. The final part was designed to attain the respondents' comments on the subject of this study. (see Appendix A for the full version of the questionnaire).

-Part One includes general questions aimed to obtain general and background information about the respondents (section A contained 6 questions) and LPCMs (section B contained 4 questions) in order to improve the reliability of posted questionnaires, it is required that the questionnaire is filled in by targeted participants.

This part consists of questions such as respondents' job titles and their work experience as independent variables to apply the Kruskal-Wallis test, as a non-parametric test, to analyse the significant differences between participants' views according to these variables which are categorised and based on the functional degrees in the Libyan Civil Services law *No 55 /1976.*

-**Part Two** consists of 21 questions designed to focus on the first objective of the study, which is to examine the role of management accounting practices in LPCMs. In order to achieve this objective, this part is split into sections A, B and C according to sub-objectives and research questions. **Section A** consists of questions seeking to obtain information about the budget preparation and long-term financial plans in LPCMs. These questions were designed according to the following sub-objectives:

- Investigating the current practices of budget preparation in LPCMs.
- Examining medium and long-term financial planning in LPCMs.

These objectives linked with 2 research questions which are:

- What is the process of budget preparation in LPCMs?
- To what extent do LPCMs prepare medium and long-term financial plans?

Section B consists of questions seeking to obtain information about budgetary control. These questions were prepared based on the following sub-objective:

- Analysing the extent of use of budgetary control information in LPCMs.

This objective will be achieved by the following research question:

- To what extent do the management accounting techniques in LPCMs provide budgetary control information?

The final section contains questions about performance evaluation. These questions were designed according to the following sub-objective:

- Assessing the extent of use of performance measurement methods in LPCMs.

This objective will be obtained by the following research question:

- To what extent are performance measurements used in the LPCMs?

-**Part Three** of the questionnaire is designed to achieve the second objective of the current study about some contingent factors that affect the application of management accounting techniques in the Libyan environment particularly in LPCMs. These factors were selected by a focus group of 12 Libyan PhD accounting students at Liverpool JMU and factors that emerged from previous studies (see chapter 1 section 1-4). This part consists of one question which is designed according to the following objective:

- To evaluate the factors that might have an impact on the management accounting practices in LPCMs.

This objective was attained by the following research question:

- What factors affect the management accounting practices in LPCMs in the current Libyan business environment?

Regarding part two and three several questions were asked of the participants to mark a 5 point Likert-type scale response. In this regard, Bernard (2000) Likert-type scales are often 5-point scales. Thus the rationale behind using Likert-type scales is:

1. to give participants a range of options,
2. to obtain respondent's feelings or opinions and determine the differences between participants views about some subjects,
3. increase the response rate,

-**Part Four** contains 8 general questions about the existing management accounting practices in particular and accounting in general in LPCMs. These questions identify the development of management accounting within the LPCMs, identify the level of importance and satisfaction with management accounting information, explain recent changes and possible future changes in the management accounting practices that may impact on their organisation since the suspension of sanctions imposed on Libya and identify any strengths and weaknesses of the management accounting system, which are in use.

Thus, the aims and objectives of this study and the research questions are described along with their analysis method in table 4-8.

Table 4-8: Objectives, Questions and Analysis Method for this study

Aims	Objectives	Questions	Questionnaire	Analysis Method
1-To explore and examine the current practices of management accounting techniques within LPCMs and their role in providing information for planning, control, decision making and performance evaluation.	**1. To examine the role of management accounting practices in LPCMs.** - Investigating the current practices of budget preparation in LPCMs. - Analysing the extent of use of budgetary control information in LPCMs. - Assessing the extent of use of performance measurement methods in LPCMs. - Examining medium and long-term financial planning in LPCMs.	-What is the process of budget preparation in LPCMs? -To what extent do the management accounting techniques in LPCMs provide budgetary control information? -To what extent are performance measurements used in the LPCMs? -To what extent do LPCMs prepare medium and long-term financial plans?	Part One/ Part Two	Descriptive statistics/ Kruskal-Wallis test
	3. To determine strengths and weaknesses of the current practices of management accounting techniques in use in LPCMs	-What are the strengths and weaknesses of the current practices of management accounting techniques in LPCMs?	Part Four	Descriptive statistics
2-To analyse the selected factors that may have affected those practices, especially after the final lifting of UN sanctions on Libya.	**2. To evaluate the factors that might have an impact on the management accounting practices in LPCMs.**	-What factors affect the management accounting practices in LPCMs in the current Libyan business environment?	Part One/ Part Three	Descriptive statistics/ Kruskal-Wallis test

4-6-1-4-4 The pilot study

A pilot study was carried out to ensure validity and reliability of the questionnaire for achieving the primary objectives of a study, (Saunders *et al.*, 2009). In this respect, Remenyi *et al.*, (2002) recommend that pre-testing of any questionnaire should be conducted before finally administering the instrument, in order to identify any shortcomings in its design and administration. Sekaran (2003) also stresses the importance of pre-testing a survey instrument to ensure that questions are understood by the pilot sample, which should be representative of the eventual participants.

The use of a pilot study was discussed with a focus group of 12 Libyan PhD accounting students at Liverpool JMU, to obtain their comments; because they have enough knowledge of accounting in the Libyan business environment and a few questions were improved by prior studies (Al-Dhowaihy, 2003; Ouda, 2003; Waweru *et al.*, 2004, and Oliorilanto, 2008).

In this respect, the purpose of the pilot study was to test the study method, in particular, the wording of the questions, and their clarity, length, and layout, and the relevance of questionnaire items to the investigation of the study. Using a pilot study increases the response rates and validity and reliability of the study. Five LPCMs were used in the pilot study and were selected randomly. This piloting of the questionnaire instrument in the environment which was expected to be used was to confirm the appropriateness and effectiveness of the instrument. A random sampling selection process was undertaken to identify the LPCMs who were used for the piloting of the Arabic version of the questionnaire. The questionnaire was translated into Arabic by a certified translator who is an expert in business and accounting translation. With the translated pilot questionnaire the researcher distributed 45 questionnaires to the Financial Managers, Financial Controllers and Managers of Services and Projects at five LPCMs where 37 questionnaires were completed and collected (82.2% of the total number of questionnaires) see Table 4-9. The translation and piloting process started in December 2007 and was completed in March 2008. The participants were asked about the simplicity and suitability of questions and the time taken to complete the questionnaire. The whole selected pilot sample group indicated that there was no need to make any major changes in the questions but a little clarification of the terminology used by the instrument. The majority of the participants reported that it took between 15-25 minutes. In addition, this pilot study enabled the researcher to obtain a preliminary understanding of the subject area.

Table 4-9: Response rate of questionnaire in Pilot study

No. Of distributed questionnaires	Uncompleted questionnaires	Valid questionnaires	Response rate
45	8	37	82.2%

To support the piloting of the questionnaire instrument, semi-structured interviews were conducted with the 6 officials of Libyan government bodies who are aware of the current practices of management accounting techniques used in LPCMs. The interviewees were selected on their work experience according to the database of General PC as they have an overview of the LPCMs sector and how the management accounting information from the LPCMs is utilised by central government bodies to inform their decision making processes. The interviewees were:

- Two officials of financial services controls of selected LPCMs (Tripoli and Gharian).
- One official in the Financial Department of General PC.

- One official in the Budget Department of General PC of Treasury.
- One official in the Planning Department of General PC of Planning.
- One official in the Financial Control and Performance Evaluation Department of General PC of Inspection and Control.

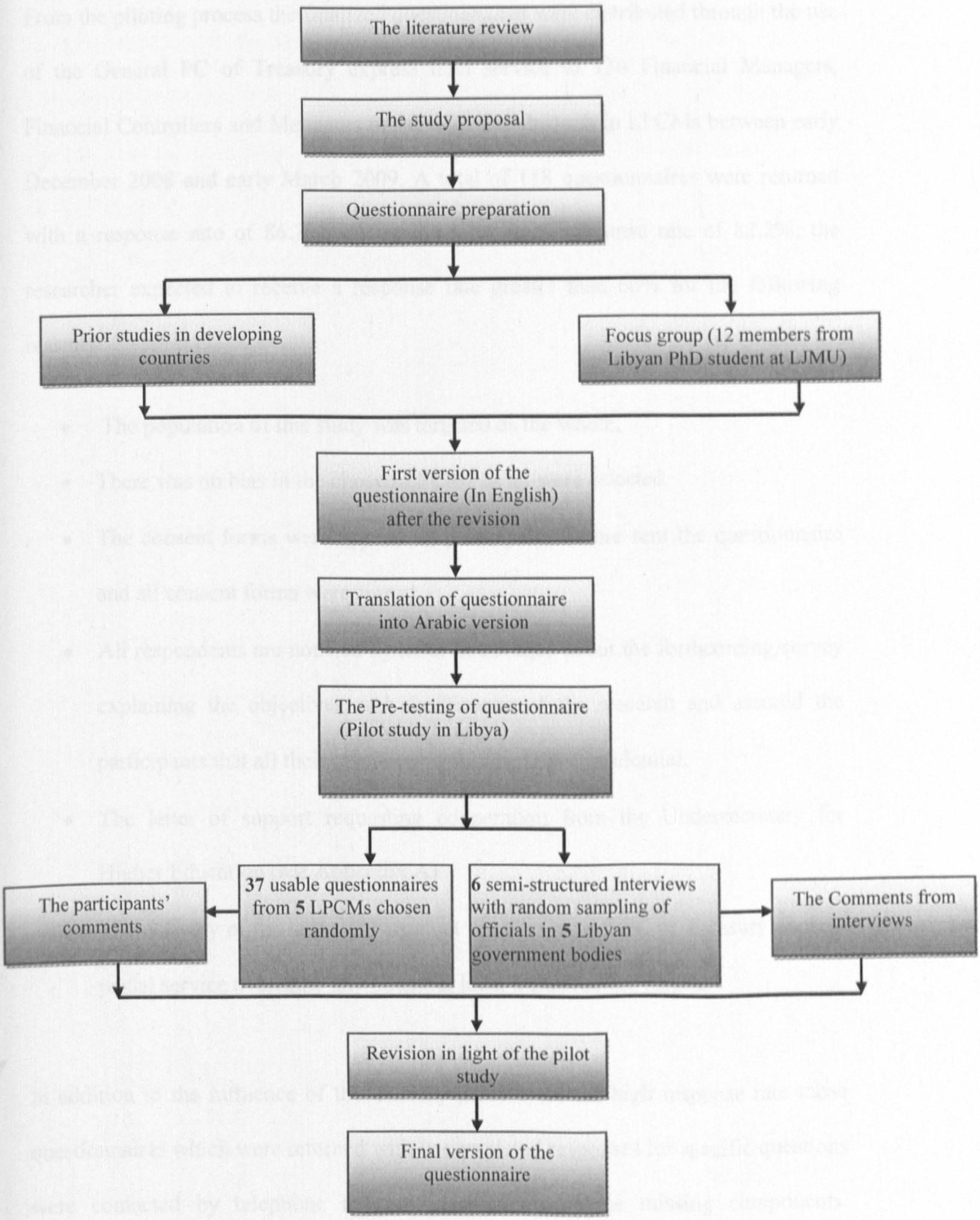
Table 4-10: The number of interviewees at the Libyan government bodies in pilot study

Interview Date	Department	Governmental bodies	No. of Interviewees
03/11/2007, 04 /11/ 2007	Financial services controls of LPCMs (Tripoli and Gharian).	General PC of Treasury	2
11/11/ 2007	Financial department	General PC	1
06/ 11/ 2007	Budget Department	General PC of Treasury	1
23/ 11/2007	Planning Department	General PC of Planning	1
27/ 11/ 2007	Financial Control and Performance Evaluation Department	General PC of Inspection and Control	1
Total			6

By having a spread of officials across the central government bodies, the pilot process gained secondary confirmation that the questionnaire was detailed enough and covered the subject with enough depth and breath. It was important to have some involvement by the central government bodies as they have the power to change policies and practices within the LCPMs. The effect of central government policies can be observed in the organisational restructuring which occurred between 2007 and 2008. The strategic opinion from these officials was required to ensure that the questionnaire was maintaining its relevance to the current contextual environment.

The semi-structured interviews were asked about the simplicity and suitability of questions which will be included in the main questionnaire in the final study. These interviews were also conducted in order to assess the time that will be taken for each interview and to confirm the interview questions are covered. The selected interviewees suggested some modifications and changes to the various questions including questions relating budgetary control and performance evaluation. The following Figure 4-4 describes the Pilot study and Pre-Testing of the questionnaire in this study.

Figure 4-4: The Pilot study and Pre-Testing the Questionnaire



4-6-1-4-5 Distribution and response rate of the questionnaire

From the piloting process the finalized questionnaires were distributed through the use of the General PC of Treasury express mail service to 136 Financial Managers, Financial Controllers and Managers of Services and Projects in LPCMs between early December 2008 and early March 2009. A total of 118 questionnaires were returned with a response rate of 86.7%. After the pilot study response rate of 82.2%, the researcher expected to receive a response rate greater than 60% for the following reasons:

- The population of this study was targeted as the whole.
- There was no bias in the chosen LPCMs as all were selected.
- The consent forms were sent to all participates before sent the questionnaire and all consent forms were signed.
- All respondents are notified by letter in advance about the forthcoming survey explaining the objectives and significance of the research and assured the participants that all their responses would be kept confidential.
- The letter of support requesting cooperation from the Undersecretary for Higher Education (see Appendix A)
- The delivery of the survey instrument via the General PC of Treasury express postal service overcame any potential local infrastructure issues.

In addition to the influence of the delivery process for the high response rate those questionnaires which were returned with uncompleted responses for specific questions were contacted by telephone to gain clarification of the missing components. Fowler (2009) states that the best step to increase the response rate is to call non-respondents via the telephone. In this study the ability to contact individuals via telephone enabled the completion of sentences where individuals had been disturbed in their completion of the survey. When communicating with the few individuals who had incomplete responses for specific questions, it was apparent that there was a positive view in the conversation about the research topic and this enthusiasm could be another reason why there was such a high response rate. Harrison (2010) points out that, if a mail questionnaire is a topical point of interest, it is more likely to be completed.

There are some important factors which have to be taken into the researcher's consideration to support the response rate (see section 4-6-1-4-2 in this chapter which discusses the questionnaire design process and the rationale in developing the questionnaire). Eighteen (18) questionnaires were put aside from the study because they were not completed satisfactorily and this lack of information would unduly influence the final interpretation of the dataset. Attempts were made to contact the specific participants to gain clarification for their missing questions but unfortunately they were not contactable by the researcher. As a result of the incomplete responses these questionnaires were removed as the statistical analysis would have been skewed for particular question sets. As the response rate was already high, the removal of these questionnaires from the dataset was felt not to create an additional bias as Saunders *et al.*, (2009) suggest that a 30 % response rate is a reasonable rate for a postal questionnaire. Owen and Jones (1994) also state that a response rate of 20% of questionnaires returned without reminder is considered satisfactory, so a 40% response rate is considered to be very good. In the case of this research study the response rate of 86.7 % was double the good level see table 4-11.

As mentioned earlier in Section 4-6-1-4-1, between the pilot process and the final study administration there had an organisational restructuring process by Central Government and this impacted on the potential number of participants available in the LPCMs.

Table 4-11: Sample size and Response rate of questionnaire

No. of distributed questionnaires	Uncompleted questionnaires	Valid questionnaires	Response rate
136	18	118	86.7%

Respondents	*Frequency*	*Percentage (%)*
Financial Managers	41	34.8
Financial controllers	50	42.3
Managers of services and projects	27	22.9
Total	118	100

Harrison (2010) indicates that since the questionnaire had the support of an official or government agency and was related to their interactions with this central government agency, the sample targets were more likely to participate and return their questionnaires. As the survey was relevant to their daily activities in their professional roles, the participants are likely to have an interest and again are more likely to participate in the questionnaire (Harrison, 2010).

4-6-1-4-6 Reliability of responses

A pilot study was conducted to assess and improve the validity and reliability of the questionnaire. In this respect, Saunders *et al.*, (2009) stress that the validity and reliability of the collected data and response rate depend on the design of questions, the structure of the questionnaire, and the pilot testing. The validity of the questionnaire in this study was obtained from different qualified and experienced participants who participated in the pilot study. As mentioned before the questionnaire was set up by 12 Libyan PhD accounting students at Liverpool JMU, who have knowledge of accounting in Libyan business environment and 6 specialists in management accounting in the Libyan public sector, The pilot participants provided the researcher with some comments, suggestions and points of view on the suitability of the questionnaire along with additional information in relation to some previous studies.

Researchers use the Cronbach's Alpha coefficient in order to confirm the internal consistency of the selected scales for this study. Pallant (2007) states that the Cronbach's Alpha Coefficient technique is commonly used of internal consistency (reliability). Sekaran (2003) and Field (2009) states that the closer the reliability coefficient gets to 1.0 the better. Field (2009) points out that reliability of less than 0.06 is considered to be poor while this reliability at 0.07 is acceptable. Therefore, the reliability responses of this study were tested utilizing SPSS software which resulted in a Cronbach's Alpha result of 0.8366 (see Appendix E). This result ($\alpha = 0.8$) means the reliability of responses is high according to Alpha ranking. The internal reliability of responses was also assessed in the questionnaire when participants were asked about their positions and qualifications. This question was designed to assess if the respondent had the required background and professional qualification to make comments and statements of professional opinion. The Cronbach's Alpha analysis explains that the targeted respondents answered all the questionnaires and the majority of the respondents were suitably qualified to be respondents (see Appendix D). To improve the reliability of posted questionnaires it was necessary that the questionnaire is completed by targeted participants, because they would have sufficient knowledge and experience to provide the required level of reliable data, (Saunders *et al.*, 2009).

Participants were asked if they would like a copy of the results of this study and more than 50% of respondents were interested in obtaining a copy of the present study (see chapter 5 Table 5-5-7 for additional information). This high percentage of interest enhances the questionnaire results and underlines the seriousness of respondents, thus increasing the confidence in the reliability of responses. It also supports the verbal discussions in relation to half completed specific questions where the research encountered enthusiasm for the topic and the relevance to the individual's current role in their LPCMs.

4-6-2 The Interview Method

Interviews are used when there are subject matters that cannot be analysed through a quantitative survey approach or for triangulation. The most common type of interview is an individual, face to face verbal interchange. Saunders *et al.*, (2009) state that interviews can be structured, semi-structured or unstructured.

Structured interviews are interviews based upon a structured set of questions and therefore highly standardized is form of content (Kumar, 2008). There is a list of predetermined questions which must be asked to each participant in structured interview (Sekaran, 2003). In this regard, Easterby-Smith *et al.*, (2008) point out that structured interviews aim to achieve quantitative results from a carefully targeted sample. In a structured interview, there is no opportunity for additional probing or follow-up questioning based on participants' responses. Thus, it is possible for a complete picture of phenomena to be missed (McCrady *et al.*, 2010).

Alternatively the researcher could have used unstructured interviews. This kind of interview depends on open-ended questions. This interview will give the interviewees an opportunity to talk freely about events, behaviour and beliefs with regard to the topic area (Burns and Scapens, 2000). Kumar (2008) indicates that unstructured interviews are used mostly in an exploratory situation and they provide in-depth information about the phenomena. Unstructured interviews are less common in quantitative research because of their inherently unpredictable nature due to the flexibility of the interview process; the same interviewer may elicit different categories of information from different participants (McCrady *et al.*, 2010).

The final type of interview is a semi-structured interview. In this type of interview, the interviewer attempts to control the circumstances of the interview in order to collect data in a constant manner as far as possible (Moor, 2000). In semi-structured interviews, interviewees and questions must be determined beforehand, as well as the research questions and objectives may need to be explained, so the wording of the questions could be changed and modified based upon the respondents' understanding and perceptions (Saunders *et al.*, 2009). The semi-structured interview provides an opportunity for the interviewer to ask additional questions to gain clarification from the interviewee about their responses (Saunders *et al.*, 2009). Furthermore, semi-structured interviews split the difference between structured and unstructured interviews, gaining some of the benefits while sharing some of the negatives. They have the same set of questions for each participant, thus increasing reliability and provide additional information (McCrady *et al.*, 2010).

Semi-structured interviews were conducted in private meetings with officials at Libyan government bodies that have a relationship with LPCMs, during the period from December 2008 to January 2009. The purpose of semi-structured interviews in this study was to confirm and support the questionnaires' responses. The secondary purpose of the semi-structured interview process was to increase the response rate and reliability of questionnaires responses as well as attaining more in-depth information. With the recent changes to the organisational structures within LPCMs, the interview processes for the questionnaire was carried out prior to the questionnaire being distributed to the LPCMs as the researcher was concerned that further changes may have been required for the questionnaire. The interview process was undertaken with a new group of officials who were not in the earlier pilot but were based in the Libyan central government bodies who were most affected by the recent structural reorganisation. Harrison (2010) argues that it is important to ensure as many potential issues with mail surveys are removed to ensure the quality and validity of data collected. By interviewing the Central Government officials, the researcher was attempting to address any validity and reliability issues that the recent structural changes may have created with the questionnaire instrument.

The interviewer who undertakes semi-structured interviews needs to have sufficient skills and experience in the interview topic area before conducting the interviews (Myers, 2009). Semi-structured interviews need specific time with the respondents according to Saunders *et al.*, (2009), and it may bring in researcher bias. Saunders *et al.*, (2009) describe three types of bias to be considered when conducting interviews. The interviewer's comments and behaviour may create bias through the interview which may affect the interviewee responses. Interviewee bias arises when he/she gives biased answers also to please the interviewer or to hide some facts which affect the responses. Sample bias may arise as a result of bias in the personal or organisational interviews. As a result of this guidance during the semi-structured interviews the following procedures (Figure 4-5) were utilised in order to conduct the interviews and reduce bias:

- Each interviewee was asked to sign a consent form. In this form the researcher explained the purpose and significance of this study in the same manner. As part of the informed consent process, the participants were assured that all data obtained will be used just for research and that they could stop the research process at any point including the removal of their data from the final data analysis after the interview.

- The interviewees were selected randomly from each organisation so therefore all samples of the same organisation had an equal chance to be selected from the population.

- After obtaining their acceptance by consent form, the researcher called them to arrange a suitable appointment for interview.

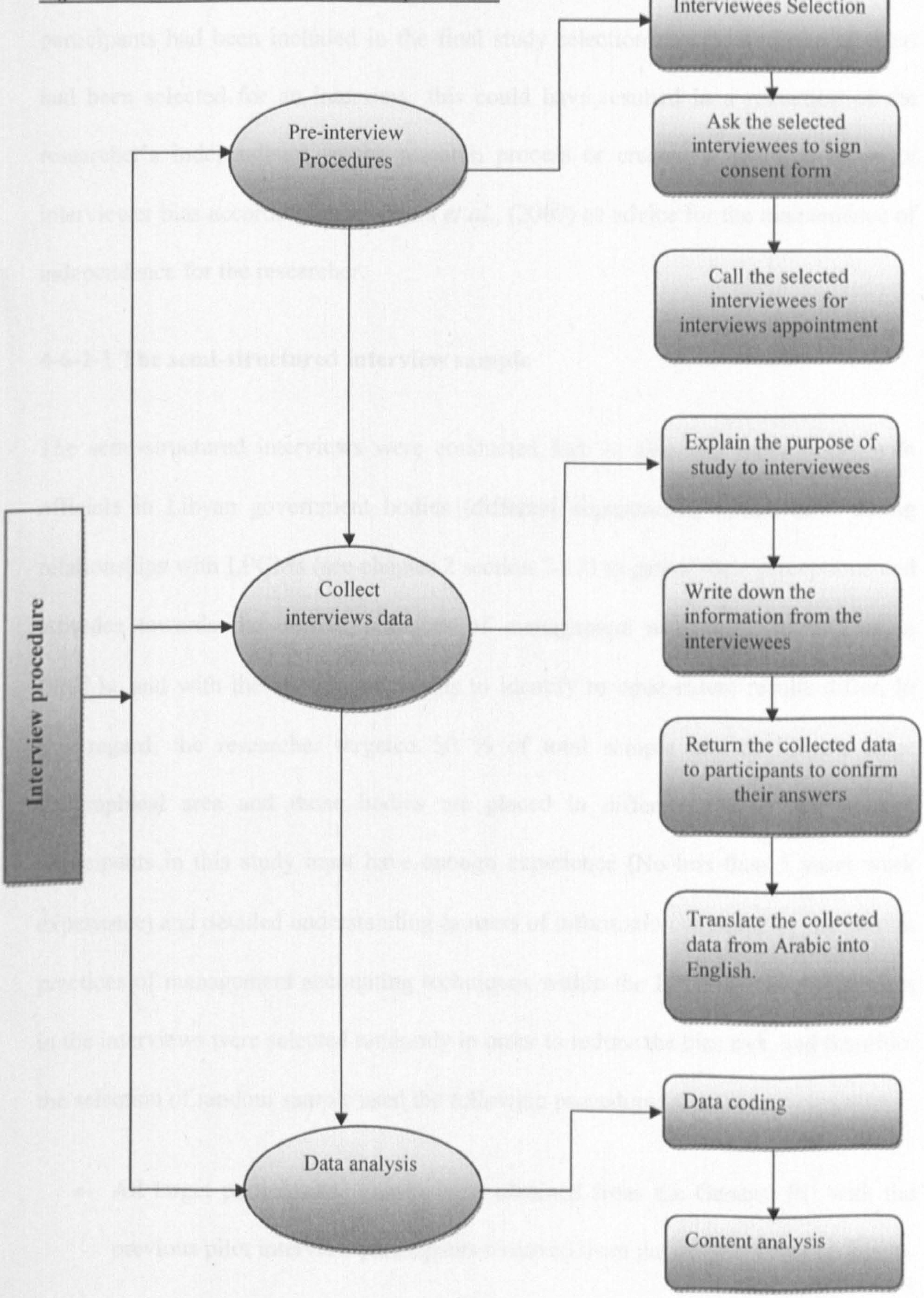
- All interviews were conducted face-to-face with interviewees and the same questions have been asked of each participant. The questions were asked in the same context.

- The researcher made every effort to ensure that each question is understood in the same way by all participants in order to avoid false data due to misunderstood questions.

- The researcher maintained an atmosphere of conversation during the interview process.

- The information from the interviewees was returned to each one of them personally to enhance and confirm their answers. This information compared to questionnaire's results to enhance the validity and reliability of responses. This process also allows the participant to edit and reflect on their responses removing any statements which they do not feel comfortable including in the research data.

Figure 4-5: the semi-structured Interview procedures



The pilot study interviews utilized the above procedure for the semi-structured interviews. Those participants in the pilot study were excluded from the final study interview selection process to ensure that their previous interaction with the researcher did not influence their participation in the interview process. If the pilot interview participants had been included in the final study selection process and one of them had been selected for an interview, this could have resulted in a reduction of the researcher's independence in the research process or created a potential cause of interviewer bias according to Saunders *et al.*, (2009) as advice for the maintenance of independence for the researcher.

4-6-2-1 The semi-structured interview sample

The semi-structured interviews were conducted face to face and individually with officials in Libyan government bodies (different departments) which have strong relationships with LPCMs (see chapter 2 section 2-13) to gather their perceptions and attitudes towards the current practices of management accounting techniques in LPCMs, and with the above participants to identify to what extent results differ. In this regard, the researcher targeted 50 % of total sample due to Libya's large geographical area and those bodies are placed in different cities. The targeted participants in this study must have enough experience (No less than 5 years work experience) and detailed understanding as users of information obtained by the current practices of management accounting techniques within the LPCMs. The participants in the interviews were selected randomly in order to reduce the bias risk, and therefore the selection of random sample used the following procedure:

- All target participants' names were obtained from the General PC with the previous pilot interview participants removed from the sample selection group.

- Each remaining target participant had an equal probability of being selected from the population.
- The processes of selecting participants were separate from each other according to the government bodies.
- In each selection process, each participant was issued with a participant number, and therefore all participants' numbers have written on small pieces of papers separately, which were then put in a box and mixed well. From this box the participant number was selected.

The original pilot interviewee selection group were not included in the final selection group due to the structural changes and also due to the potential issues of interviewer bias through over familiarity with the interviewer. The population of the final study contained the following participants who were randomly selected in their groups according to their organisational bodies are as follows:

1) There were four target participants in the Budget Department of General PC of Treasury and therefore two of them were selected to participate in the interview process.
2) Within the Taxation body of General PC of Treasury, a total of four targeted participants were identified and again two representatives were selected from this organisation.
3) From the Financial Services Controls of LPCMs, there were a total of 34 target participants who could have engaged in the interview process. Eighteen of the LPCMs agencies were willing to engage and therefore the researcher chose nine officials as participants in individual interviews using the selection process.

4) In the Financial Department of General PC population of six, fifty percent were targeted totalling 3 participants who were involved in the interview process.
5) From the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control there were four target participants and again two representatives were selected from this organization using the sample selection process.
6) Two officials of four targeted participants from the Planning Department of General PC of Planning participated in the interviews.

This breakdown of the participants is described in Table 4-12 below, giving the interview dates and organisational details.

Table 4-12: The number of interviewees at the Libyan government bodies

Interview Date	Department	Governmental bodies	No. of Interviewees
11/12/2008, 12 /12/ 2008	Budget department	General PC of Treasury	2
11/12/2008, 14 /12/ 2008	Taxation body	General PC of Treasury	2
04/ 12/ 2008, 06/ 12/ 2008, 08/ 12/ 2008, 10/ 12/ 2008, 21/ 12/ 2008,25/ 12/ 2008, 28/ 12/ 2008, 30/ 12/ 2008, 31/ 12/ 2008	Financial services controls of LPCMs	General PC of Treasury	9
02/ 12/ 2008, 05/ 12/ 2008, 23/ 12/2008	Financial department	General PC	3
06/ 01/ 2009, 07/ 01/ 2009	Financial Control and Performance Evaluation Department	General PC of Inspection and Control	2
02/ 01/ 2009, 04 / 01/ 2009	Planning department	General PC of Planning	2
Total			20

The interviews took about 2 hours with the each official. The sample of interviewees were provided with information and explained further matters related to the importance of information about the current practices of management accounting techniques in LPCMs. Interviews are considered as an efficient technique for collecting a large amount of data for this research.

In terms of work experience of respondents, as shown in Table 4-13, ten respondents (50%) had between 5-10 years. Of these, six respondents (30 %) had more than 15 years experience and no interviewee had less than 5 years work experience. Of these, four respondents (20 %) had between 10-15 years professional experience in their field (The information centre for the General PC, 2008).

Table 4-13: The experience levels of respondents

Experience	Frequency	Percentage
Less than 5 years	-	-
5-10 years	10	50
10-15 years	4	20
More than 15 years	6	30
Total	20	100

4-6-2-2 Semi-structured interview Questions

The semi-structured interview questions were set by the questionnaire questions. Therefore, the semi-structured interviews questions were discussed and improved by the focus group of 12 Libyan accounting PhD students at Liverpool JMU who had helped in the development of the questionnaire and these interviews were conducted with the key officials in Libyan government bodies. The interview questions were divided into six sections (see appendix B). The researcher asked all the participants several questions to obtain background biographical information about interviewees such as qualification and experience.

The sections were analyzed and highlighted the same subjects in the questionnaire but in more detail. Section One contains a group of questions that are concerned with budget preparation, section two focused on budget implementation; section three was concerned with budgetary control information, section four examined the controlling and performance evaluation, section five assessed the final accounts of LPCMs, while section six explored the factors that affect the current practices of management accounting techniques in LPCMs.

The first section of the interview questions included some questions related to several issues of budget preparation. There is a question addressed to specific officials dependent on their role in the various departments when dealing with budget committees for the budget preparation within LPCMs. Also there are questions concerned with their organisational sections expenditure and revenue disbursement included in the budget preparation and maintenance. These questions asked participants to identify the regulations, methods, controls and basis used to prepare the budget in LPCMs along with identifying the primary responsibility for preparing development plans.

The second section of the semi-structured interview contained a group of questions that are concerned with budget implementation. The questions focused on who are responsible for budget implementation in LPCMs, the steps of budget implementation and the actions taken about the spending and revenue, and the activities undertaken in relation to the spending of development plans.

The third section of the interview dealt with budgetary control information. The questions related to person in charge of budgetary control information, the period and technique used for providing reports of budgetary control information, and the satisfaction of participants regarding the frequency, accuracy and detailing of reports and allocation technique of payments.

The fourth section of the semi-structured interview concentrated on the performance evaluation of LPCMs. Therefore, the questions focused on the primary responsibility for monitoring actual performance against goals, the level of participants satisfaction about the frequency, accuracy, detailing and period of reports to central government bodies, the rationale behind performance evaluation and what are the weaknesses of performance evaluation system in LPCMs and why.

The fifth section in the interview process focused on the final accounts preparation of LPCMs. Therefore, the questions in this section examined the procedures of final accounts, the responsibility for final accounts preparation of PCMs and the benefit of final accounts for stakeholder organisation.

The final section of the semi-structured interview explored the views of all participants regarding the factors that affect the current practices of management accounting techniques in Libyan environment and particularly in LPCMs. The questions focused on the importance of factors that influence the current practices of management accounting techniques. These factors include top management support, adequate financial resources for accounting development, using computer systems for management accounting purposes, management accounting training programmes, incentive systems, accounting education, professional accounting bodies, location of PCMs, business environment, policy of government, and economic changes.

4-7 Data Analysis

There are many statistical techniques of analysing quantitative and qualitative data. For achieving the purposes of the current study, several techniques were adopted such as descriptive statistics, non-parametric tests and content analysis.

4-7-1 Descriptive techniques

The researcher notes that in general, two types of statistical analysis are used, these being descriptive and inferential (Pallant, 2001). Pallant (2007) states that descriptive statistics (such as mean, median, standard deviation) have different uses such as to describe the characteristics of the participants of the study, to address the research questions, and to address any specific research questions. Therefore, descriptive statistics were used in this study to describe the characteristics of the respondents of the study and to assist the answering of research questions.

4-7-2 Non-parametric tests:

The non-parametric techniques used for the analyses nominal or ordinal data, by different background characteristics was Kruskal-Wallis test. The Kruskal-Wallis test is utilised to compare the statistically significant differences between three or more independent population means (Pallant, 2007). Therefore, The Kruskal-Wallis test is a one-way, between-groups analysis of variance that allows a comparison of three or more groups (Pallant, 2001).

Non-parametric statistical tests demand fewer conditions according to Saunders *et al.*, (2009) and is useful for when data is not normally distributed. Whereas, Singh (2007) explains the reasons for using non-parametric tests are:

- The lack of need for the dataset to come from a normally distributed population thus they can be described as distribution-free tests.
- The dataset can be simply ranked and this is why some of the non-parametric tests are called "*ranking tests* ".
- The simplicity of their use makes them popular with students and researchers.
- This form of statistical test is applicable and useful to researchers who have small sample sizes.

The choice of this statistical analysis is undertaken according to Hensher *et al.*, (2005) depends on the number of variables, the purpose of the study and the scale of measurement. Zikmund (2000) points out that the most familiar form of such analysis is the calculation of averages, frequency distributions, and percentage distributions. The most important issue in statistical methods is the test of difference between independent samples under consideration derived from the determined population, (Singh, 2007).

Accordingly, the collected data in this study is categorical measured (nominal and ordinal). Therefore, the researcher used the Kruskal-Wallis test as non-parametric test in this study because it suits the nature of the data analysis to be undertaken (Pallant, 2007). This test is used to analyse the significant differences between participants' views according to their job titles and their work experiences which are categorised based on the functional degrees in the Civil Services law *No 55 /1976* (see Appendix D).

4-7-3 Content analysis technique

The researcher used *content analysis* to analyse the data that was collected from the semi-structured interviews with the targeted participants. Collis and Hussey (2003) describe *content analysis* as a formal approach to qualitative data analysis that is usually associated with a positivistic approach where analysed material is classified into different coding units which are normally pre-constructed by the researcher. This technique was chosen instead of NVIVO approach due to the small sample size (20 interviews). In addition the collected qualitative data was also going to be analysed by the content analysis technique and this standardisation of the techniques implemented enabled the researcher to manage the research process. Therefore, all the collected data from interviews were translated from Arabic language to English language. As answers were analysed using the *content analysis* which identified and categorized the main samples in the collected data. The collected data in this study was analysed and classified manually based on the cross- interview approach suggested by Patton (1990).

4-8 Ethical Approval

The researcher before starting this research study requested ethical approval and consideration from Liverpool John Moores University's [LJMU] Research Ethics Committee (see Appendix C) for the approval letter. Grinnell and Unrau (2008) advise that ethical considerations are an important consideration for any research activity, especially when undertaking data collection. Bryman and Bell (2007) highlight that ethical participant consideration is undertaken and all research should be undertaken only with the approval of the supervising institution to help protect the potential participants. Young (2006) provides clear guidelines to LJMU researchers about the required ethical guidelines and procedures which can be summarised as the following:

- Potential participants are given free will to determine whether or not they wish to participate in the research process.
- The establishment of the right which should be clearly communicated to participants that they can withdraw from the research process at any point.
- That formal consent is sought from the participant prior to their involvement in the research process.
- That the researcher is clear and open about all the requirements for involvement in the research so the participants are making informed consenting choice to participate.
- That the nature and purpose of the research study is communicated to potential participants and their organizations.

4-9 Summary

The main purpose of this chapter has discussed and described the methodology adopted to achieve the objectives of study. The chapter described the positivistic and phenomenological research paradigms, and considered the approach utilized by the researcher for this study, which uses a combination of quantitative and qualitative approaches. The rationale for the selection of the research methods of questionnaire and semi-structured interviews were discussed to explain and justify the reasoning behind the selection of these methods. LPCMs were selected as the field of study since they represent the Libyan government. The descriptive statistical analysis is the main test used in this research. The purpose of descriptive statistical analysis is to describe the characteristics of the study's population and to achieve the objectives of study. The next chapter will present the descriptive statistical analysis of questionnaires to understand the current practices of management accounting techniques within LPCMs.

Chapter Five

Chapter Five

Questionnaire Data Analysis

5-1 Introduction

The aim of this chapter is to provide a general introduction to LPCMs and the respondents to the surveys who work for LPCMS. This chapter will also explain the management accounting techniques used in LPCMs by analysing the budget preparation, budgetary control and development plans and performance evaluation. The chapter also analyses and evaluates the factors that have an impact on management accounting practices. Furthermore, the chapter will attempt to identify the development of management accounting systems in Libya, the level of satisfaction with management accounting information, and the recent changes in the management accounting systems after the sanctions imposed on Libya were lifted.

5-2 Part One: General information of participants

This part analyses the information about the target participants in this study for understanding the overall background of the respondents. To improve the reliability of posted questionnaires it is necessary that the questionnaire is completed by targeted participants, because sufficient knowledge and experience of participants are required to provide reliable data, (Saunders *et al.* 2009). Therefore, the data provided by the following parts of respondents' job title, academic qualifications, field study and work experience have an impact on findings to make sure that the questionnaires filled in by target respondents in this study. The total sample can be presented in term of age, education and experience. The information presented in this part it is important to get a general idea of the sample's socio-economic characteristic, as these may have an impact on sample representatives, and could raise interesting issues for further studies for additional information about the participants please see Appendix D.

5-2-1 The job title of the respondents

The findings of this section will be used to determine the significant differences between participants' views according to their positions the initial biographical question collected information about respondents and Table 1 in Appendix D reveals that 34.8% of questionnaires completed were financial managers, 42.3% were financial controllers and 22.9% were managers of services and projects. These findings may be attributed to the government regulations which require financial managers to deal with all financial issues. Financial controllers by Libyan financial law are supervisors and decision makers about all financial and management accounting practices within the LPCMs. This result ensures the reliability of collected data.

5-2-2 The work experience of respondents

The findings of this section will be used to determine the significant differences between participants' views according to their work experience. Therefore, the respondents were asked to state the length of their work experience. Table 5-1 shows 48.4% of respondents have had more than 20 years experience while 92.4% had had more than 10 years of total work experience. It is again supporting the reliability of collected data. There will no individuals with less than 5 years work experience as participants were selected from Management roles. To work as a Manager Civil Servants are required by Libyan Civil Service Law 55 to have a minimum of 5 years work experience and an undergraduate degree.

Table 5-1: The work experience of respondents

Respondents' work experience	Frequency	Percent
Under 5years	0	0
5-10 years	10	8.5
11-15 years	30	25.4
16-20years	22	18.6
21-25years	28	23.7
26-30years	20	17
Over 30years	8	6.8
Total	118	100

5-2-3 Respondents' age

The aim of this question is to make sure that the target participants have filled in the questioners, according to the Libyan civil service law No 55, all managers of departments and financial controllers in LPCMs must have:

Postgraduate qualification or higher in conjunction with more than 5 years work experience or hold their Diploma/ Secondary qualification with at least 7 years work experience. Therefore, each manager must be aged no less than 25 years old.

Table 5-2 shows no respondents were younger than 25 years, 37.3% were aged between 36 and 45 years, while more than three quarters 80.6% were aged under 51 years. Only 4.2% were aged over 55 years. As participants were selected from the Management pool with the various agencies they would not have an age level less than 25 years due to Libyan education system as individual complete their pre-professional education at age 19 which is the Diploma or Secondary qualification. If an individual is appointed a Manager in the Civil Service with just their Secondary qualification they are required by the Civil Service Law No 55 (1976) to have a minimum of 7 years work experience. These legal requirements on the gateway entry path to management mean that there will be no participants under the age of 25. As demonstrated in Table 5-2 there was no participants who where younger than 25 and this confirms that the participants targeted and recruited to the survey fit with the legal requirements with Libya and therefore are valid and reliable participants.

Table 5-2: Respondents' age

Age	Frequency	Percent
Under 25years	0	0
25-35years	20	17
36-45years	44	37.3
46-50years	30	25.4
51-55years	19	16.1
Over 55years	5	4.2
Total	118	100

5-2-4 Encouraging respondents to participate in accounting training and development programs

The training and development programs as important factors might be have an impact on management accounting practices. Therefore, it should be necessary to examine the extent that respondents as managers in LPCMs participate in accounting training and development programs. The Libyan Central government through The General PC of Planning (2008) has a long history of providing funding for professional development and training programs and actively encourages all Civil Service Managers to undertake further higher education to gain professional and post graduate qualifications. Table 5-3 reveals 99.2% of respondents indicated that they are encouraged to participate in accounting training and development programs. In the other hand 0.8% of respondents are not encouraged. However, the majority of respondents are encouraged to participate in accounting training and development programs. The large response rate for encouragement to participate in accounting training and development programs is a reflection of the current National Development Plan (2006 – 2010) being run by the General PC of Planning.

Table 5-3: Encouraging respondents to participate in accounting training and development programs

Yes		No	
Frequency	Percent	Frequency	Percent
117	99.2	1	0.8

5-2-5 The extent of encouraging of respondents to participate in accounting training and development programs

Table 5-4 reveals that the frequency distribution of study sample responses about the extent of encouragement that respondents to participate in accounting training and development programs. 45.8% of respondents show that respondents were always encouraged to participate in accounting training and development programms, 28.8% of them were often encouraged, 20.3% of them were sometimes encouraged and 4.5% of them rarely.

Furthermore, the table below shows some of the statistical measures regarding the extent of encouraging respondents to participate in accounting training and development programms. It reveals a mode of 5 (Always) of encouraging the respondents to participate in training and development programs, where most respondents answered that they are often or always encouraged to participate in accounting training. In addition the median was 4 (Often) of the respondents encouraged to participate in training and development programs.

The above results clarify that most respondents in LPCMs are encouraged to participate in training and development programs. This encouragement of respondents could mean that there is an intention to improve their skills. These results are evidence of the extent of the General PC of Planning funding and policy and how this push for greater skill levels in Civil Service Mangers is starting to impact on changing from traditional to modern technology, knowledge and skills in Libya.

Table 5-4: The extent of encouragement respondents to participate in accounting training and development programs

Never		Rarely		Sometimes		Often		Always	
F	P	F	P	F	P	F	P	F	P
0	0.0	5	4	24	20	34	29	55	47

Mean and Std. deviation		Minimum and Maximum		Median And Mode		
Mean	Std. deviation	Minimum	Maximum	Median	Mode	Frequencies' Mode
4.17	.90	2	5	4	5	75

5-2-6 The Professional accounting qualifications

Table 5-5 indicates the shortage of accountants with professional accounting qualifications, where, LPCMs had two types of professional accounting qualifications. The first is Libyan certified accountant (LCA) which is the most commonly held professional accounting qualification for financial officers in LPCMs. The second is Arab certified accountant which is rarely seen in LPCMs. This defines that local certified accountant, such as (LCA) are more popular in developing countries, like Libya than other qualifications.

Table 5-5: professional accounting qualifications in Libya

Professional Qualifications	Sum	Percent
Libyan Certified Accountant (LCA)	1000	79.6
Arab Certified Accountant (ACA)	256	20.4
British Chartered Certified Accountant (ACCA)	0	0
American Certified Public Accountant (CPA)	0	0
British Chartered Management Accountant (CIMA)	0	0
American Certified Management Accountant (CMA)	0	0
Total	1256	100

5-3 Part two: The practices of Management accounting techniques in LPCMs

The objective of this part is to examine the role of management accounting techniques in LPCMs. This part focuses on investigating budget preparation, analysing the extent of use of budgetary control information and financial planning and examining of the extent of use of performance measurement methods.

5-3-1 Budget Preparation

This section highlights budget preparation in LPCMs of understanding management accounting techniques in use through identifying the use of budgets, the basis of budget preparation, the responsibility for preparing and implementing the budget and the motive for budget preparation.

5-3-1-1 The use of budgets and their importance to PCMs

Table 5-6 reveals that 100 % of respondents indicate that revenue and expenditure budget (annual budget) is important in LPCMs, while the monthly labour budget and monthly materials budget are used as part of expenditure in LPCMs 83.4 % and 80.9 % respectively. 83.5 of % respondents also point out that the cash budget is important.

In addition, this table shows some statistical measures regarding the use of budgets and their importance to LPCMs. It reveals a median of 5 (extremely important) for revenue and expenditure budget (annual budget). 107 of respondents answered that the revenue and expenditure budget (annual budget) is extremely important. Therefore, more than 90 % of respondents indicated that revenue and expenditure budget (annual budget) is extremely important to LPCMs. Table 5-6 below shows a median of 3 (average importance) for monthly labour budget, whereas a median of 2 (below average importance) for monthly materials budget and cash budget. Hence, all

LPCMs are using the revenue and expenditure budget (annual budget) in order to achieve compliance with the government regulations such as Libyan financial law 1967.

Table 5-6: The use of budgets and their importance to LPCMs

Budgeting	1		2		3		4		5		6	
	F	P	F	P	F	P	F	P	F	P	F	P
Revenue and Expenditure budget (Annual budget)	0	0.0	1	0.8	0	0.0	10	8.5	107	90.7	0	0.0
Monthly Labour budget	17	16.7	24	23.5	28	27.5	7	6.9	26	25.5	0	0.0
Cash budget	16	16.5	35	36.1	16	16.5	8	8.2	22	22.7	0	0.0
Monthly Materials budget	19	19.2	35	35.4	15	15.2	5	5.1	25	25.2	0	0.0

Budgeting	Mean and Std. deviation		Minimum and Maximum		Median And Quartiles		
	Mean	Std. deviation	Mini Mum	Maxi mum	Median	Q1	Q3
Revenue and Expenditure budget (Annual budget)	4.88	0.39	2	5	5	5	5
Monthly Labour budget	3.26	1. 78	1	5	3	2	5
Cash budget	3.05	1.75	1	5	2	2	4
Monthly materials budget	3.4	1.82	1	5	2	2	5

1= unimportant. 2= below average importance. 3= average importance. 4 =above average importance. 5= extremely important. 6= not applicable.

5-3-1-2 The body responsible for the budget preparation

A total of 99.2 % of respondents stated that the budget committee is responsible for the budget preparation see Appendix D for Table 2 for complete details.

5-3-1-3 The members of the budget committee

Table 5-7 reveals that a budget committee consists of 5 departments in LPCMs. Departments were listed in the questionnaire; five departments were included in the budget committee in most LPCMs.

Furthermore, it reveals that 100% of respondents state that financial department, planning and statistics department and financial controller are members of the budget committee. 63.6 % of service and project departments are members of the budget committees and 84.7% of respondents indicate that administration affairs is a member of the budget committee, but the audit office is not member in budget committee in any LPCMs.

The absence of audit office as member in budget committee is as a result of the authorities and tasks of audit office which are determined by Libyan financial law Libya State, 1967; General People's Congress, 2008). The important task of audit office is reviewing the financial transactions before spending and follow-up of revenue collection to ensure the compliance with directions and annual budget (General People's Congress, 2008).

Table 5-7 The members of the budget committee

The members	Yes		No	
	Frequency	Percent	Frequency	Percent
Audit office	0	0.0	118	100.0
Financial department	118	100.0	0	0.0
Planning statistics department	118	100.0	0	0.0
Financial controller	118	100.0	0	0.0
Service& Project department	75	63.6	43	36.4
Administration affairs	100	84.7	18	15.3

5-3-1-4 The basis of budget preparation

Table 5-8 reveals 98.3 % of respondents pointed out that cash basis was used in LPCMs. 1.7 % of respondents stated that accrual basis was used as basis for budget preparation. Therefore, the majority of respondents attested that the LPCMs use the cash basis of budget preparation. On the other hand few of them use the accrual basis and modified cash basis of budget preparation in LPCMs.

Table 5-8: The basis of budget preparation

Basis	Yes		No	
	Frequency	Percent	Frequency	Percent
Cash basis	116	98.3	2	1.7
Accrual basis	2	1.7	116	98.3
Modified cash basis	0	0.0	118	100

5-3-1-5 The starting point of annual budget preparation

The respondents were asked to state the most frequent starting point which is used for budget preparation of the coming year. Table 5-9 shows that 83.9% of respondents stated that the Average original budget for last 3 years is starting point in preparing the budget for the next year. The next most frequent starting point is the Original budget for last year with 16.1 %.

Table 5-9: The starting point of budget preparation

Data	Yes		No	
	Frequency	Percent	Frequency	Percent
Average original budget for last 3 years	99	83.9	19	16.1
Modified budget for last year	0	0.0	118	100
Original budget for last year	19	16.1	99	83.9

5-3-1-6 The methods in budget preparation

Table 5-10 shows that 99.2 % of respondents point out that the method of budget preparation were Line-Item Budgeting and incremental budgeting (Traditional method). While other methods are not used for preparing a budget except a few respondents 0.8 % who indicate that the planning, programming budgeting used as a budget preparation method. From these responses the LPCMs used a traditional method as a technique for preparing the budget.

Table 5-10: The methods of budget preparation

Methods	Yes		No	
	Frequency	Percent	Frequency	Percent
Line-Item Budgeting and incremental budgeting. (traditional technique)	117	99.2	1	0.8
Zero based budgeting.	0	0.0	118	100.0
Planning, programming budgeting	1	0.8	117	99.2

5-3-1-7 The motives for budget preparation

The responses in table 5-11 indicate that the majority of respondents state that controlling and monitoring, compliance with government regulations and planning for the future are above average importance in LPCMs. Performance evaluation and guidance for decision-making are less important based on the survey responses as seen in Table 5-11 with the overall median scores of 3 which is average importance for the respondents.

Furthermore, the table shows Kruskal-Wallis test and some statistical measures regarding the motives for budget preparation in LPCMs.

- First group including the Financial Managers. Median is 5 (extremely important) for controlling and monitoring and compliance with government regulations, while median is 4 (above average importance) for planning for the future and median for performance evaluation and Guidance for decision-making is 3 (average importance).
- Second group including the Financial Controllers. Median is 5 (extremely important) for controlling and monitoring and compliance with government regulations, while median is 4 (above average importance) for planning for the future and median for performance evaluation and guidance for decision-making is 3 (average importance).
- Third group including the Service and Project Managers. Median is 5 (extremely important) for controlling and monitoring and compliance with government regulations, while median is 4 (above average importance) for planning for the future and median for performance evaluation and guidance for decision-making is 3 (average importance).

Kruskal-Wallis test was used to analyse the distribution of responses based on the job title of respondents to determine the differences between the groups mentioned above according to the importance of motives for budget preparation in LPCMs by the sample size 118 and significance level 0.05. From table 5-11 it is observed that the significance level is more than 0.05 about all responses. Therefore, there are no significant differences between the responses of financial managers, financial controllers and service and project managers about the important motives for budget preparation listed in the table below.

Table 5-12 shows that there are no significant differences between financial managers' responses analysed by their work experience about the important motives for budget preparation. Also, table 5-14 reveals that there are no significant differences between services and projects managers' responses analysed by their work experience about the important motives for budget preparation.

Moreover, table 5-13 shows the distribution of financial controllers' responses according to their work experience in PCMs and it concludes that there is a statistically significant difference with the compliance with government regulations as a motive for budget preparation. Therefore, the significance level of 0.01 indicated that the result for the Compliance with Government regulations has a highly significant relationship with the work experience of the six sets of financial controllers. When looking at the means for each group of financial controllers the low mean amount for those financial controllers with 5-10 years work experience indicates that this motive is less important to this group when compared to the other groups of financial controllers who have greater than 10 years work experience.

Table 5-11: The Kruskal- Wallis test of the importance of budget preparing motives in LPCMs analysed by the job title of respondents

Motives	1		2		3		4		5	
	F	P	F	P	F	P	F	P	F	P
Controlling and monitoring	0	0.0	0	0.0	0	0.0	3	2.5	115	97.5
Compliance with government regulations	0	0.0	0	0.0	2	1.7	15	12.7	101	85.6
Guidance for decision-making	0	0.0	21	17.8	62	52.5	26	22.0	9	7.6
Performance evaluation	7	5.9	34	28.8	53	44.9	16	13.6	8	6.8
Planning for the future	1	0.8	8	6.8	21	17.8	66	55.9	22	18.6

Motives	Mean			Median			Overall median	Overall mean	Sig.
	Financial managers	Financial controller	Service & Project managers	Financial managers	Financial controller	Service & Project managers			
Controlling and monitoring	4.97	4.98	4.96	5	5	5	5	4.97	0.90
Compliance with government regulations	4.80	4.86	4.85	5	5	5	5	4.83	0.79
Guidance for decision-making	3.21	3.14	3.25	3	3	3	3	3.84	0.96
Performance evaluation	3.0	2.8	2.77	3	3	3	3	2.86	0.54
Planning for the future	3.90	3.86	3.74	4	4	4	4	3.19	0.88

1= unimportant. 2= below average importance. 3= average importance. 4 =above average importance. 5= extremely important.

Table 5-12: The Kruskal- Wallis test of the importance of budget preparation motives in LPCMs analysed by the work experience of respondents (financial managers' responses)

Motives	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Controlling and monitoring	5.00	4.91	5.00	5.00	5.00	5.00	0.81
Compliance with government regulations	4.66	5.00	4.75	4.80	4.75	4.50	0.60
Guidance for decision-making	3.16	3.00	3.12	3.20	3.50	4.00	0.61
Performance evaluation	3.16	2.75	2.75	3.00	3.12	4.50	0.14
Planning for the future	4.50	3.83	3.75	4.00	3.50	4.50	0.13

Table 5-13: The Kruskal- Wallis test of the importance of budget preparation motives in LPCMs analysed by the work experience of respondents (financial controllers' responses)

Motives	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Controlling and monitoring	5.00	5.00	5.00	4.92	5.00	4.98	0.78
Compliance with government regulations	4.25	4.93	5.00	4.92	4.60	5.00	0.01
Guidance for decision-making	3.50	3.06	2.90	3.21	3.60	2.50	0.37
Performance evaluation	3.50	2.93	2.60	2.71	2.80	2.00	0.47
Planning for the future	3.50	3.66	3.80	4.07	4.40	3. 50	0.39

-The distribution of responses according to the work experience of respondents is significantly different at compliance with government regulations.

Table 5-14: The Kruskal- Wallis test of the importance of budget preparation motives in LPCMs analysed by the work experience of respondents (services and projects managers' responses)

Motives	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Controlling and monitoring	5.00	5.00	4.75	5.00	5.00	5.00	0.41
Compliance with government regulations	5.00	4.33	5.00	5.00	4.83	4.66	0.11
Guidance for decision-making	3.00	3.00	3.50	3.28	3.50	3.00	0.96
Performance evaluation	2.50	2.00	3.00	3.42	3.16	2.33	0.40
Planning for the future	4.00	4.00	4.00	3.85	3.33	3.66	0.92

5-3-1-8 Level of centralisation

As shown in Table 5-15 a high proportion of respondents 93.2% indicated that budget preparation is not centralised at all or centralisation was limited. There was only 6.8% who indicated that there was some centralisation in their budget preparation procedures and development.

Table 5-15: Level of centralisation

Level of centralization	Frequency	Percent
Not centralised at all	100	84.7
To a limited extent centralised	10	8.5
To a moderate extent centralised	0	0.0
To a considerable extent centralised	2	1.7
Completely centralised	6	5.1
Total	118	100

5-3-1-9 The starting point of development plan preparation

Table 5-16 shows that 72.9 % of respondents stated that the last 5 year development plan is the starting point in preparing the development plan for the next 5 years. The next most frequent starting point is the last 3 year development plan which has a total of 27.1 %.

Table 5-16: The starting point of development plan preparation

Data	Yes		No	
	Frequency	Percent	Frequency	Percent
Last 3 years development plan	32	27.1	86	72.9
Last 5 year development plan	86	72.9	32	27.1

5-3-1-10 The periods of development plan in LPCMs

Table 5-17 shows frequency distribution of study sample responses about the periods of development plans while 61 % of responses indicate that LPCMs had always prepared plans for a period of 4 to 5 years, 24.6 % and 11.9 % of them are often and sometimes respectively. Regarding the plans for a period of 1 to 3 the respondents state that 60.2 % of them are sometimes and, 30.5 % of them are always. More than

94 % of respondents point out that the preparing of plans for a period of over 5 years ahead is rarely or never.

Furthermore, the table shows Kruskal-Wallis test and some of statistic measures regarding the periods of plans in LPCMs.

- First group including the Financial Managers. Median is 5 (always) for a period of 4 to 5 years, while median is 3 (sometimes) for a period of 1 to 3 years and median for a period of over5 years is 1 (never).

- Second group including the Financial Controllers. Median is 5 (always) for a period of 4 to 5 years, while median is 3 (sometimes) for a period of 1 to 3 years and median for a period of over5 years is 2 (rarely).

- Third group including the Service and Project Managers. Median is 5 (always) for a period of 4 to 5 years, while median is 4 (often) for a period of 1 to 3 years and median for a period of over5 years is 1 (never).

Kruskal-Wallis test is used to test the significant differences between the groups which mentioned above regarding the periods of plans in LPCMs. From table 5-17 it is observed that there are not significant differences between the responses of financial managers, financial controllers and service and project managers about the periods of plans in LPCMs listed in table below. Also, table 5-18, 5-19 and 5-20 reveal that there are not significant differences between financial managers' responses, financial controllers' responses and services and projects managers' responses analysed by their work experience about the periods of development plans in LPCMs, at the sample size 118 and significance level 0.05 according to the Kruskal Wallis test. Five year development plans are prepared in all LPCMs according to government regulations, but Medium plans (1 to 3 years plan) are often prepared by services and projects managers depend on five year development plans of LPCMs.

Table 5-17: The Kruskal- Wallis test for the periods of the development plan in LPCMs analysed by the job title of respondents

Periods	1		2		3		4		5	
	F	P	F	P	F	P	F	P	F	p
For a period of 1 to 3 years	0	0.0	0	0.0	71	60.2	11	9.3	36	30.5
For a period of 4 to 5 years	2	1.7	1	0.8	14	11.9	29	24.6	72	61.7
For a period of over5 years	65	55.1	46	39.0	6	5.1	0	0.0	1	0.8

Periods	Mean			Median			Overall median	Overall mean	Sig.
	Financial managers	Financial controller	Service & Project managers	Financial managers	Financial controller	Service & Project managers			
For a period of 1 to 3 years	3.46	3.76	3.96	3	3	4	3	3.70	0.07
For a period of 4 to 5 years	4.56	4.36	4.33	5	5	5	5	4.42	0.55
For a period of over5 years	1.41	1.62	1.51	1	2	1	1	1.52	0.31

1= Never. 2= Rarely. 3= Sometimes. 4 = Often. 5= Always.

Table 5-18: The Kruskal- Wallis test for the periods of the development plan in LPCMs analysed by the work experience of respondents (financial managers' responses)

Periods	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
For a period of 1 to 3 years	3.16	3.25	3.25	3.80	3.87	4.00	0.26
For a period of 4 to 5 years	5.00	4.83	4.25	4.20	4.37	4.50	0.13
For a period of over5 years	1.50	1.41	1.37	1.00	1.50	2.00	0.46

Table 5-19: The Kruskal- Wallis test for the periods of the development plan in LPCMs analysed by the work experience of respondents (financial controllers' responses)

Periods	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
For a period of 1 to 3 years	4.00	3.53	3.60	3.78	4.40	4.00	0.60
For a period of 4 to 5 years	4.50	4.13	4.70	4.57	3.60	4.50	0.36
For a period of over5 years	1.75	1.46	1.70	1.64	1.80	1.50	0.94

Table 5-20: The Kruskal- Wallis test for the periods of the development plan in LPCMs analysed by the work experience of respondents (Services and Projects managers' responses)

Periods	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
For a period of 1 to 3 years	3.50	4.00	4.25	3.57	3.66	4.66	0.54
For a period of 4 to 5 years	5.00	4.66	3.50	4.28	4.66	4.33	0.28
For a period of over5 years	2.00	2.00	1.25	1.28	1.66	1.33	0.58

5-3-1-11 The extent of members' responsibility for implementing the budget

Table 5-21 shows an attempt to determine the responsibility of managers / or departments in LPCMs for implementing the budget within budget allocated for specific areas of operational responsibility. In addition, this table reveals that all members listed in table below were responsible for implementing the budget by 100 % of respondents, but there were variances in the extent of responsibility of individual managers /or departments for implementing the budget in LPCMs.

Furthermore, the Kruskal-Wallis test and some statistic of measures in table 5-21 were used regarding the extent of responsibility of members for implementing budgets in LPCMs. It reveals the following:

- The First group consisted of the financial managers. The median was 5 (complete responsibility) for audit office and financial controller, while the median was 4 (considerable responsibility) for financial department and median for planning department, service & project department and administration affairs was 3 (moderate responsibility).

- The Second group was the financial controllers. The median was 5 (complete responsibility) for audit office, financial department and financial controller. While the median was 3 (moderate responsibility) for planning department, service & project department and administration affairs.

- The Third group was the service and project managers. The median was 5 (complete responsibility) for audit office, financial department and financial controller. While the median was 4 (considerable responsibility) for service and project department and median for planning department and administration affairs was 3 (moderate responsibility).

These results clarify that the respondents answered that the audit office, financial department and financial controller have complete responsibility for implementing the budget. This might be as a result of the compliance with financial law issued in 1967.

In order to, test differences in the degree of responses across the three groups regarding the extent of members' responsibility for implementing the budget, Kruskal-Wallis Test was used to analyse the significant differences between the responses of financial managers, financial controllers and service and project managers on the sample size 118 and significance level 0.05. From this table 5-21 it is observed that there are statistically significant differences between the answers of financial managers, financial controllers and service and project managers about the service and project departments as members responsible for budget implementation, where the significance level is 0.03. This might be that the service and project departments in LPCMs are not responsible for completing all documents regarding the expenditure and revenue procedures of budget, and therefore these departments might seek to implement their work without the full compliance with General PC of Treasury directions and regulations. These regulations were prepared to ensure that the budget is implemented according to the financial regulations.

Table 5-22 also reveals Kruskal-Wallis test was used on the sample size of 118 and significance level 0.05, to determine the significant differences between financial managers' responses based on their work experience regarding the responsible members for budget implementation in LPCMs, whereas the significance level is 0.01 between the six sets of financial managers according to their work experiences relates to the importance attached to administration affairs as member responsible for implementing the budget. Therefore, there are statistically significant differences between the answers of financial managers analysed by division their work experiences to sets about administration affairs as member responsible for implementing the budget in PCMs. However, financial managers' set who have over 30 years work experience have seen that administration affairs is less responsible than other financial managers' sets who have 5-10 years, 11-15 years, 16-20 years, 21-25 years and 26-30 years. The financial mangers with over 30 years work experience see that administration affairs department activities are less responsible role in the implementation of the budget as Al-Badre (2007) states that this department is required by regulations and legislative requirements to act as the human resource agency within government bodies. Within the LPCMs the Administrative Affairs Department while they have no direct influence to the implementation they can influence the participants who are responsible to implement the budget (General People's Congress, 2001).

Tables 5-23 and 5-24 reveal that there are no significant differences between financial controllers' responses and services and projects managers' responses analysed by their work experience about the extent of members' responsibility for implementing the budget in PCMs, for the sample size of 118 and significance level 0.05 according to the Kruskal-Wallis test.

It can be seen that the responsible departments for implementation of the budget are the audit office, financial department and financial controller and this is a result of the government regulations regarding the Lines of authority and responsibility in organisational structure of LPCMs (Al-Badre , 2007). These results confirm that all LPCMs comply with the Libyan financial law which specifies and regulates the responsibility for budget implementation.

Table 5-21: The Kruskal- Wallis test of the extent of members' responsibility for implementing the budget analysed by the job title of respondents

Members	1		2		3		4		5	
	F	P	F	P	F	P	F	P	F	P
Audit office	0	0.0	0	0.0	5	4.2	45	38.1	68	57.6
Financial department	0	0.0	0	0.0	7	5.9	49	41.5	62	52.5
Planning department	0	0.0	8	6.8	67	56.8	39	33.1	4	3.4
Service & Project department	1	0.8	17	14.4	50	42.4	38	32.2	12	10.2
Administration affairs	2	1.7	41	34.7	53	44.9	18	15.3	4	3.4
Financial controller	1	0.8	0	0.0	0	0.0	10	8.5	107	90.7

Members	Mean			Median			Overall median	Overall mean	Sig.
	Financial managers	Financial controller	Service & Project managers	Financial managers	Financial controller	Service & Project managers			
Audit office	4.46	4.56	4.59	5	5	5	5	4.53	0.60
Financial department	4.34	4.50	4.59	4	5	5	5	4.46	0.16
Planning department	3.19	3.36	3.48	3	3	3	3	3.33	0.21
Service & Project department	3.12	3.38	3.70	3	3	4	3	3.36	0.03
Administration affairs	2.80	2.82	2.92	3	3	3	3	2.83	0.83
Financial controller	4.80	4.90	4.96	5	5	5	5	4.88	0.48

-1= Not at all, 2= Small responsibility, 3= Moderate responsibility, 4= Considerable responsibility, 5= complete responsibility.
-The distribution of responses according to job title of respondents is significantly different at Service and Project department as responsible member for the budget implementation.

Table 5-22:The Kruskal- Wallis test of the extent of members' responsibility for implementing the budget analysed by the work experience of respondents (financial managers' responses)

Members	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Audit office	4.50	4.41	4.50	4.80	4.37	4.00	0.70
Financial department	4.33	4.16	4.62	4.40	4.37	4.00	0.67
Planning department	3.50	3.08	3.12	3.00	3.25	3.50	0.61
Service & Project department	3.33	2.66	3.50	3.20	3.25	3.00	0.34
Administration affairs	3.33	2.25	2.87	3.40	3.00	2.00	0.01
Financial controller	4.83	5.00	4.87	5.00	4.37	4.50	0.41

- The distribution of financial managers' responses according to their work experience is significantly different Administration affairs as responsible member for the budget implementation.

Table 5-23:The Kruskal- Wallis test of the extent of members' responsibility for implementing the budget analysed by the work experience of respondents (financial controllers' responses)

Members	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Audit office	4.50	4.80	4.40	4.50	4.40	4.50	0.63
Financial department	4.75	4.66	4.40	4.35	4.60	4.00	0.46
Planning department	3.00	3.46	3.30	3.50	3.20	3.00	0.79
Service & Project department	3.25	3.40	3.30	3.50	3.60	2.50	0.79
Administration affairs	2.80	3.00	2.60	2.92	2.80	2.50	0.69
Financial controller	5.00	5.00	4.90	4.78	5.00	4.50	0.14

Table 5-24:The Kruskal- Wallis test of the extent of members' responsibility for implementing the budget analysed by the work experience of respondents (services and projects managers' responses)

Member	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Audit office	4.50	4.33	4.50	4.71	4.83	4.33	0.64
Financial department	4.00	4.66	4.50	4.57	4.66	4.66	0.89
Planning department	3.50	3.66	3.25	3.71	3.33	3.66	0.79
Service & Project department	3.50	3.33	3.75	3.71	3.50	4.33	0.64
Administration affairs	2.50	3.33	2.25	3.14	3.50	3.00	0.32
Financial controller	5.00	5.00	4.75	5.00	5.00	5.00	0.41

5-3-2 Budgetary Control

This section focuses on budgetary control in LPCMs by identifying the budgetary control information to controlling and monitoring bodies, the source of providing this information and the period for providing reports for budgetary control.

5-3-2-1 The periods for providing reports of budgetary control

Table 5-25 shows that 99.2 % of respondents indicated that the period for providing budgetary control reports was quarterly. 83.1 % of respondents stated that the period for budgetary control reports was on demand. Therefore, most respondents indicated that reports provided quarterly and on demand respectively. Only 18.6 % mentioned the other reporting periods of half yearly or annually.

Table 5-25: The period for providing reports of budgetary control

Monthly		Quarterly		Half yearly		Annually		On demand	
F	P	F	P	F	P	F	P	F	P
1	0.8	117	99.2	21	17.8	1	0.8	98	83.1

5-3-2-2 The extent of providing budgetary control information to controlling bodies

Table 5-26 shows frequency distribution of study sample responses about the extent of providing budgetary control information to control bodies. 72 % of responses indicate that LPCMs always provide budgetary control information to Libyan control bodies, 25.4 % of responses are often and 2.5 % of responses are sometimes, whereas Mode and Median were 5 (always). This defines the extent of providing budgetary control information to central government was always. The LPCMs provide budgetary control information by reports to central government bodies.

Table 5-26: The extent of providing budgetary control information to controlling bodies

Never		Rarely		Sometimes		Often		Always	
F	P	F	P	F	P	F	P	F	P
0	0.0	0	0.0	3	2.5	30	25.4	85	72.1

Mean and Std. deviation		Minimum and Maximum		Median And Mode	
Mean	Std. deviation	Minimum	Maximum	Median	Mode
74.	0.51	3	5	5	5

5-3-2-3 The extent of existing budgetary control components

Table 5-27 reveals that 100% of respondents stated that salaries and awards, operational expenditure, services expenditure and income were elements or components included in the budgetary control information in LPCMs. Whereas Mode and Median were ranked 5 (always) for all budget allocations listed in table below. The table also indicates that all budget allocations listed were most used in budgetary control with a mean score of 4.8 (SD = 0.36) (for further information see chapter 2).

Table 5-27: The extent of existing budgetary control components

Components	Never		Rarely		Sometimes		Often		Always	
	F	P	F	P	F	P	F	P	F	P
Salaries & awards	0	0.0	0	0.0	0	0.0	19	16.1	99	83.9
Operational expenditure	0	0.0	0	0.0	0	0.0	23	19.5	95	80.5
Services expenditure	0	0.0	0	0.0	0	0.0	23	19.5	95	80.5
Income	0	0.0	0	0.0	2	1.7	28	23.7	88	74.6

Components	Mean and Std. deviation		Minimum and Maximum		Median And Mode	
	Mean	Std. deviation	Minimum	Maximum	Median	Mode
Salaries & awards	4.8	0.36	4	5	5	5
Operational expenditure	4.8	0.39	4	5	5	5
Services expenditure	4.8	0.39	4	5	5	5
Income	4.7	0.48	3	5	5	5

5-3-2-4 The use of computers for applying budgetary control

Respondents were asked about the use of computers for applying budgetary control. Table 5-28 shows relatively little use of computer to apply budgetary control information in LPCMs. Whereas 33.9 % of respondents indicated that LPCMs used computers to apply the budgetary control information. 66.1 % of respondents stated that LPCMs did not use computers to apply the budgetary control information.

Table 5-29 reveals that a mode and median were 2 that correlates with the *rarely* response on the Likert-like scale on the survey questionnaire.

Table 5-28: The use of computers for applying budgetary control

Yes		No	
Frequency	Percent	Frequency	Percent
40	33.9	78	66.1

Table 5-29: The extent of using of computers for applying budgetary control

Never		Rarely		Sometimes		Often		Always	
F	P	F	P	F	P	F	P	F	P
0	0.0	31	77.5	9	22.5	0	0.0	0	0.0

Mean and Std. deviation		Minimum and Maximum		Median And Mode	
Mean	Std. deviation	Minimum	Maximum	Median	Mode
2.2	0.42	2	3	2	2

5-3-2-5 The source of budgetary control reports

Table 5-30 reveals the sources of budgetary control reports in LPCMs. Whereas 99.2 % of respondents indicated that the source of budgetary control reports was monthly reporting prepared by financial departments. While 0.8 % of respondents pointed out that the actual information for budgetary control was from records of the spending departments.

Table 5-30: the sources of budgetary control reports

Source of budgetary control reports	Yes		No	
	Frequency	Percent	Frequency	Percent
Monthly reporting by financial departments	117	99.2	1	0.8
From records of the spending departments	1	0.8	117	99.2

5-3-2-6 The use of information for the budgetary control

Table 5-31 shows frequency distribution of study sample responses about the use of information for the purpose of budgetary control. 71.2 % of responses always used actual revenue and expenditure information for the budgetary control, 23.7 % of them were often. More than 50 % of respondents stated that surplus/ deficit information was often and always used for the purpose of comparison. 45.8 % of respondents stated that time apportioned amount was used rarely as information for budgetary control, although 19.5 % of respondents stated that time apportioned amount was never used as information for the purpose of budgetary control.

Furthermore, the table 5-31 shows Kruskal-Wallis test and some statistical measures regarding the use of information for budgetary control in LPCMs.

- First group including the financial managers. Median was 5 (always) for actual revenue and expenditure, while median was 5 (always) for surplus / deficit and it was 2 (rarely) for time apportioned amount.
- Second group including the financial controllers. Median was 5 (always) for actual revenue and expenditure, while median was 4 (often) for a surplus / deficit, the median for time apportioned amount was 2 (rarely).
- Third group including the service and project managers. Median was 5 (always) for revenue actual and expenditure, while median was 4 (often) for a surplus / deficit, the median for time apportioned amount was 2 (rarely). This defines that LPCMs always use actual revenue and expenditure as information to compare the actual data with prepared budget.

The Kruskal-Wallis Test was used to determine the significant differences between the answers of groups mentioned above regarding the information used in budgetary control for determining the variances in budget implementation in LPCMs. It is observed that there are no significant differences between the responses of financial managers, financial controllers and service and project managers about the information used for budgetary control for determining the variance of budget in LPCMs listed in table below. The lowest *p* value (Significance) was 0.16 and as this value was greater than 0.05 demonstrates that there was no significance in the responses according to the Kruskal-Wallis analysis. Tables 5-32, 5-33 and 5-34 show that there are no significant differences between financial managers' responses, financial controllers' responses and services and projects managers' responses analysed by their work experience about the information used for budgetary control for determining the variances from budget in PCMs on the sample size 118 and significance level 0.05 according to the Kruskal-Wallis test. Therefore, these results asserted that the main purposes of budgetary control information were to ensure that the actual expenditures and revenue in line with the proposed budget and to determine the variance.

Table 5-31: The Kruskal- Wallis test of the use of information for the budgetary control analysed by the job title of respondents

Information	1		2		3		4		5	
	F	P	F	P	F	P	F	P	F	P
Actual revenue	0	0.0	0	0.0	6	5.1	28	23.7	84	71.2
Actual expenditure	0	0.0	0	0.0	6	5.1	28	23.7	84	71.2
Time apportioned amount	23	19.5	54	45.8	37	31.4	4	3.4	0	0.0
Surplus / deficit	0	0.0	0	0.0	14	11.9	50	42.4	54	45.8

Information	Mean			Median			Overall median	Overall mean	Sig.
	Financial managers	Financial controller	Service & Project managers	Financial managers	Financial controller	Service & Project managers			
Actual revenue	4.60	4.68	4.70	5	5	5	5	4.66	0.68
Actual expenditure	4.58	4.70	4.70	5	5	5	5	4.66	0.44
Time apportioned amount	2.07	2.26	2.22	2	2	2	2	2.18	0.44
Surplus / deficit	4.48	4.24	4.29	5	4	4	4	4.33	0.16

1= never, 2= rarely, 3= sometimes, 4= often, 5= always

Table 5-32: The Kruskal- Wallis test of the use of information for the budgetary control analysed by the work experience of respondents (financial managers' responses)

Information	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Revenue amount	4.50	4.58	4.50	5.00	4.75	4.00	0.38
Expenditure amount	4.50	4.58	4.50	4.80	4.75	4.00	0.64
Time apportioned amount	2.00	1.91	2.12	2.60	2.12	1.50	0.67
Surplus / deficit	4.66	4.41	4.62	4.60	4.50	3.50	0.39

Table 5-33: The Kruskal- Wallis test of the use of information for the budgetary control analysed by the work experience of respondents (financial controllers' responses)

Information	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Revenue amount	5.00	4.73	4.50	4.64	4.80	4.50	0.76
Expenditure amount	5.00	4.73	4.50	4.64	4.80	5.00	0.70
Time apportioned amount	2.25	2.13	2.40	2.14	2.60	2.50	0.81
Surplus / deficit	4.00	4.26	4.10	4.28	4.40	4.50	0.91

Table 5-34: The Kruskal- Wallis test of the use of information for the budgetary control analysed by the work experience of respondents (Services and Projects managers' responses)

Information	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Revenue amount	4.50	4.66	4.75	4.71	4.66	4.66	0.99
Expenditure amount	4.50	4.66	4.75	4.71	4.66	4.66	0.99
Time apportioned amount	2.00	2.00	1.75	2.42	2.66	2.33	0.48
Surplus / deficit	4.50	4.66	3.75	4.28	4.66	4.00	0.34

5-3-3 Performance Measurement

This section is about performance measurement in LPCMs, where the performance indicators and the performance of measurement techniques will be explained. This section examined non-financial reports and performance evaluation in LPCMs.

5-3-3-1 The non-financial output measures included in the annual budget

Table 5-35 shows that only 3.4 % of respondents stated that non-financial output measures were sometimes included in the annual budget. 55.1 % and 41.5 % of respondents indicated that non-financial output measures were never and rarely included in the annual budget respectively. Therefore, mode and median were 1 (*never*). This strong response of *never* or *rarely* in relation to the inclusion of non-financial output measures reflects the lack of requirements in official regulations from the Libyan Financial Law (Libyan State, 1967) to have non-financial output measures in official reporting (Al-Badre, 2007).

Table 5-35: Non-financial output measures included in the annual budget

Never		Rarely		Sometimes		Often		Always	
F	P	F	P	F	P	F	P	F	P
65	55.1	49	41.5	4	3.4	0	0.0	0	0.0

Mean	Std. deviation	Mini Mum	Maximum	Median	Mode	Q1	Q3
1.5	0.57	1	3	1	1	1	2

5-3-3-2 The extent of inclusion of performance indicators in planning and control documents

Table 5-36 shows 52.5 % and 36.4 % of respondents stated that the inclusion of performance indicators in planning and control documents were little and very little respectively, where 5.1 % and 1.7 % of respondents indicated that the inclusion of performance indicators in planning and control documents were high and very high respectively. In this regard, mode and median was a score of 2, which corresponded to the *little* response demonstrating that the performance indicators were a minor component in planning and control documents of LPCMs.

Table 5-36: The extent of inclusion of performance indicators in planning and control documents

Very Little		Little		Average		High		Very high	
F	P	F	P	F	P	F	P	F	P
43	36.4	62	52.5	5	4.2	6	5.1	2	1.7

Mean	Std. deviation	Minimum	Maximum	Median	Mode	Q1	Q3
1.8	0,86	1	5	2	2	1	2

5-3-3-3 The performance measurement techniques

Table 5-37 shows some performance measurement techniques that may be employed for LPCMs, respondents indicated that budget variance analysis (analysis their results with related numbers in previous budgets for performance measurement) and meeting the budget were used as the performance measurement techniques of LPCMs. Budget variance analysis technique was from average importance to extreme importance. The appropriate level of importance regarding meeting the budget was from below average importance to extremely importance. On the other hand, Comparison with other LPCMs was not used as the performance measurement techniques in LPCMs. The LPCMs are not responsible by government regulations for measuring their performance (Libya State, 1967; 1990) but the survey response indicates that there is some evidence that LPCMs are attempting to evaluate their own performance.

Furthermore, the table shows Kruskal-Wallis test and some statistic of measures regarding the performance measurement techniques for LPCMs.

- The First group was the Financial Managers. The median was 5 (extreme importance) for budget variance analysis and meeting the budget, while the median was 2 (below average importance) for comparison with another PCMs.

- The Second group was the Financial Controllers. The median was 5 (extreme importance) for budget variance analysis and meeting the budget, while the median was 2 (below average importance) for comparison with another PCMs.
- The Third group was the Service and Project Managers. The median was 5 (extreme importance) for budget variance analysis and meeting the budget, while the median was 2 (below average importance) for comparison with another PCMs.

The Kruskal-Wallis Test was used to test the significant differences between the groups regarding the performance measurement techniques for LPCMs. From table 5-37 it is observed that there are no significant differences between the responses of financial managers, financial controllers and service and project managers about the performance of measurement techniques for LPCMs listed in table below. The Kruskal-Wallis Test results has a number of *p* values with the lowest being 0.54. This *p* value indicates that the result is not significant as the probability scale for the likely hood of significances is set at 0.05. Any result higher than this figure of ($p<0.05$) indicates that it is not a significant response. Also in tables 5-38, 5-39 and 5-40 reveal that the distribution of financial managers' responses, financial controllers' responses and services and projects managers' responses according to their work experience explains that there is no significant difference between their responses at the sample size 118 and significance level 0.05 according to the Kruskal-Wallis test. Therefore, these results highlight that the most frequently used measures for measuring the performance in LPCMs are the budget variance analysis and meeting the budget. There are some government bodies authorised by Libyan government regulations for performance measurement by controlling and monitoring the real accomplishment against plans (General People's Congress, 2001; The General PC of Planning, 2008).

Table 5-37: The Kruskal- Wallis test of the use of performance measurement techniques in LPCMs analysed by the job title of respondents

Techniques	1		2		3		4		5	
	F	P	F	P	F	P	F	P	F	p
Budget variance analysis	0	0.0	0	0.0	3	2.5	12	10.2	103	87.3
Meeting the budget	0	0.0	1	0.8	7	5.9	26	22.0	84	71.2
Comparison with another PCMs	6	22.2	15	55.6	4	14.8	2	7.4	0	0.0

Techniques	Mean			Median			Overall median	Overall mean	Sig.
	Financial managers	Financial controller	Service & Project managers	Financial managers	Financial controller	Service & Project managers			
Budget variance analysis	4.90	4.84	4.77	5	5	5	5	4.84	0.54
Meeting the budget	4.60	4.60	4.74	5	5	5	5	4.63	0.63
Comparison with another PCMs	2.00	2.00	2.50	2	2	2	2	2.07	0.66

1= unimportant. 2= below average importance. 3= average importance. 4 =above average importance. 5= extremely important

Table 5-38: The Kruskal- Wallis test of the use of performance measurement techniques in LPCMs analysed by the work experience of respondents (financial managers' responses)

Techniques	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Budget variance analysis	4.83	4.91	4.75	5.00	5.00	5.00	0.57
Meeting the budget	664.	4.50	4.87	5.00	4.37	4.00	0.38
Comparison with another PCMs	2.33	1.00	2.33	1.66	2.00	0.00	0.73

Table 5-39: The Kruskal- Wallis test of the use of performance measurement techniques in LPCMs analysed by the work experience of respondents (financial controllers' responses)

Techniques	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Budget variance analysis	4.50	5.00	5.00	4.71	4.80	4.50	0.20
Meeting the budget	4.25	4.93	4.50	4.42	4.80	4.00	0.11
Comparison with another PCMs	3.00	2.00	1.66	2.250	0.00	0.00	0.08

Table 5-40: The Kruskal- Wallis test of the use of performance measurement techniques in LPCMs analysed by the work experience of respondents (Services and Projects managers' responses)

Techniques	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30years	Over 30years	
Budget variance analysis	4.50	4.66	4.75	5.00	4.66	5.00	0.74
Meeting the budget	4.50	4.66	4.25	4.85	4.83	5.00	0.46
Comparison with another PCMs	0.00	0.00	0.00	3.50	1.50	0.00	0.10

5-3-3-4The responsibility of performance evaluation for the LPCMs

Table 5-41 shows some of the performance evaluation bodies which assess the performance of LPCMs, where 19.5 % of respondents indicated that the Performance evaluation of LPCMs was undertaken by both internal departments (financial departments and services and project departments) and external organisations (The General PC of Treasury and the General PC of Inspection and Control). The majority of the respondents (80.5%) indicated that performance evaluation of LPCMs was by only completed by the external organisations belonging to the state. LPCMs do not have a legislative requirement to undertake performance evaluation this authority sits with the central government agencies (General People's Congress, 2001).

Table 5-41: The responsibility of performance evaluation bodies for the LPCMs

	Yes		No	
	Frequency	Percent	Frequency	Percent
Performance evaluation by external organisations belonging to the state	95	80.5	23	19.5
Performance evaluation by both internal departments and external organisations belonging to the state	23	19.5	95	80.5

5-4 Part three: The impact of selected Factors on the management accounting techniques in LPCMs

This part of the questionnaire investigated important factors which were selected by the focus group of 12 Libyan PhD accounting students at Liverpool JMU and by prior studies (see chapter one section 1-3). As noted in Chapter 3 a previous study by Al-Al-Dhowaihy (2003) did not include a number of factors and it has been suggested by other authors such as Al-Akra *et al.* (2009), Oliorilanto (2008), Saleh (2007), Waweru *et al.* (2004) that these additional factors may be impacting on the development of management accounting techniques with LPCMs in Libya through the changing political and economic structure. With the support of the focus group that professional experience has been in the contextual area of the Libya system specific factors were selected that may have affected accounting in general and, the application and development of management accounting techniques within LPCMs in particular. Survey respondents were asked to indicate on a five-point Likert-like scale the importance of selected contingent factors that might have influenced management accounting techniques. The use of a Likert-like scale enables the respondent to gauge their own responses across a equal scale. 1 was unimportant, 2 was below average importance', 3 was 'average importance', 4 was 'above average importance' while item 5 was 'extremely important'.

Table 5-42 reveals that respondents considered the importance of factors that have affected application of management accounting in LPCMs. The table shows that most of the listed factors were ranked as of 'above average importance' or 'extreme importance by more than 60 % of respondents. Top management support (86.5 %), management accounting training programmes (92.4 %), motivations systems (80.5 %), adequate financial resources for accounting developments (83.9 %), using computer systems for management accounting purposes (73.8 %,), professional accounting bodies in Libya (70.8 %), accounting research in Libya (75.2 %,), accounting education in Libya (82.0 %), co-operation between universities and LPCMs (71 %,), economic changes (94.1%) and policy of government (94%) were ranked as 'above average in importance' or 'extreme importance' respectively.

The table 5-43 below shows Kruskal-Wallis test and some statistical measures regarding the importance of selected factors affecting the application of management accounting techniques in LPCMs.

- The first group was the financial managers. The median was 5 (extreme importance) for top management support, economic changes and policy of government, while median was 4 (above average importance) for other factors.

- The second group was the financial controllers. The median was 5 (extreme importance) for top management support, management accounting training programmes, economic changes and policy of government, while median was 4 (above average importance) for other factors.

- The third group was the service and project managers. The median was 5 (extreme importance) for top management support, management accounting training programmes, economic changes and policy of government, while median was 4 (above average importance) for other factors.

The Kruskal-Wallis test was employed for analysing the significant differences between the responses of groups mentioned above regarding the importance of selected factors affecting the application of management accounting techniques in LPCMs. It is observed that there are no significant differences between the responses of financial managers, financial controllers and service and project managers about the importance of selected factors affecting the application of management accounting techniques in LPCMs listed in the table below as there is not a p value less than 0.05.

Table 5-44 reveals that there are no significant differences between financial managers' responses analysed by their work experience about the important factors which have an impact on the application of management accounting techniques by Kruskal-Wallis test on the sample size of 118 and significance level of 0.05. The

lowest p value was 0.27 and this demonstrates that there is no probability that the response was significant.
Moreover, table 5-45 shows that there are statistically significant differences between the financial controllers' responses according to their work experiences about the importance of professional accounting bodies in Libya, accounting research in Libya, accounting education in Libya and economic changes as factors that have affected the application of management accounting techniques in LPCMs, where the significance level is 0.02, 0.01, 0.01, and 0.01 respectively.

However, the financial controllers who have over 30 years work experience have suggested that professional accounting bodies in Libya, accounting research in Libya, and economic changes are of less importance when compared to the opinions from the other financial controllers who have 5-10 years, 11-15 years, 16-20 years, 21-25 years and 26-30 years. The financial controllers who have 21-25 years work experience report that the accounting education in Libya is of less importance when compared to the other financial controller groups who view that this factor is more highly as displayed in Table 5-45.

Table 5-46 also reveals that there are statistically significant differences between the services and projects managers' responses based on their work experiences about the importance of accounting education in Libya as an important factor affecting the application of management accounting techniques in LPCMs, where the significance level is 0.05. However, the services and projects managers who have over 30 years work experience have seen that accounting education in Libya is less important comparing with other services and projects managers who have 5-10 years, 11-15 years, 16-20 years, 21-25 years and 26-30 years.

These findings reflect the high level of responses about all the factors listed (top management support, management accounting training programmes, motivations systems, adequate financial resources for accounting development, using computer systems for management accounting purposes, accounting research in Libya, accounting education in Libya, co-operation between universities and LPCMs, economic changes and policy of government). This means that these factors have been ranked as of above average influence on the application of management accounting techniques in LPCMs.

Table 5-42: The importance of selected factors' influence on management accounting practices

The Factors	Unimportant		Below average importance		Average importance		Above average importance		Extremely important	
	F	P	F	P	F	P	F	P	F	P
Top management support.	2	1.7	3	2.5	11	9.3	18	15.3	84	71.2
Management accounting training programmes.	0	0.0	0	0.0	9	7.6	54	45.8	55	46.6
Motivations systems	0	0.0	3	2.5	20	16.9	57	48.3	38	32.2
Adequate financial resources for accounting development.	0	0.0	4	3.4	15	12.7	66	55.9	33	28.0
Using computer system for management accounting purposes.	1	0.8	4	3.4	26	22.0	54	45.8	33	28.0
Professional accounting bodies in Libya.	2	1.8	8	7.1	23	20.4	49	43.4	31	27.4
Accounting research in Libya.	0	0.0	2	1.7	27	23.1	55	47.0	33	28.2
Accounting education in Libya.	0	0.0	2	1.7	19	16.2	55	47.0	41	35.0
Co-operation between universities and LPCMs.	2	1.7	7	6.0	25	21.4	56	47.9	27	23.1
Economic changes.	0	0.0	3	2.5	4	3.4	38	32.2	73	61.9
Policy of Government	0	0.0	1	0.8	6	5.1	28	23.7	83	70.3

F=frequency, P=percentage.

Table 5-43: The Kruskal- Wallis test of the selected factors' influence on management accounting practices in LPCMs analysed by the job title of respondents

The Factors	Mean			Median			Overall median	Overall mean	Sig
	Financial managers	Financial controllers	Service & Project managers	Financial managers	Financial controllers	Service & Project managers			
Top management support.	4.51	4.52	4.51	5	5	5	5	4.51	0.88
Management accounting training programmes.	4.29	4.42	4.48	4	5	5	5	4.38	0.26
Motivations systems	4.12	4.12	4.03	4	4	4	4	4.10	0.86
Adequate financial resources for accounting development.	4.14	4.06	4.03	4	4	4	4	4.08	0.69
Using computer system for management accounting purposes.	3.97	4.04	3.81	4	4	4	4	3.96	0.59
Professional accounting bodies in Libya.	4.00	3.89	3.65	4	4	4	4	3.87	0.63
Accounting research in Libya.	3.95	4.12	3.92	4	4	4	4	4.01	0.50
Accounting education in Libya.	4.15	4.24	4.00	4	4	4	4	4.15	0.48
Co-operation between universities and LPCMs.	3.80	3.88	3.84	4	4	4	4	3.84	0.63
Economic changes.	4.34	4.66	4.59	5	5	5	5	4.53	0.23
Policy of Government	4.48	4.70	4.74	5	5	5	5	4.63	0.12

Table 5-44: The Kruskal- Wallis test of the selected factors' influence on management accounting practices in LPCMs analysed by the work experience of respondents (financial managers' responses)

The Factors	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30 years	Over 30years	
Top management support.	4.50	4.58	4.37	4.60	4.37	5.00	0.96
Management accounting training programmes.	4.16	4.41	4.37	4.40	4.25	3.50	0.39
Motivations systems.	4.16	4.00	4.00	3.80	4.50	4.50	0.56
Adequate financial resources for accounting development.	4.16	4.16	3.87	4.80	4.00	4.00	0.41
Using computer system for management accounting purposes.	3.83	4.00	3.87	4.40	3.75	4.50	0.79
Professional accounting bodies in Libya.	3.83	4.08	4.00	4.50	3.75	4.00	0.79
Accounting research in Libya.	3.83	4.25	3.50	4.20	4.00	3.50	0.27
Accounting education in Libya.	4.16	4.00	4.12	4.60	4.00	5.00	0.56
Co-operation between universities and LPCMs.	3.50	4.00	3.75	4.00	3.50	4.50	0.27
Economic changes.	4.33	4.50	4.12	4.60	4.12	4.50	0.88
Policy of Government	4.66	4.66	4.37	4.40	4.25	4.50	0.82

Table 5-45: The Kruskal- Wallis test of the selected factors' influence on management accounting practices in LPCMs analysed by the work experience of respondents (financial controllers' responses)

The Factors	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30 years	Over 30years	
Top management support.	4.50	5.00	4.30	4.35	4.20	4.00	0.32
Management accounting training programmes.	4.00	4.73	4.20	4.35	4.40	4.50	0.25
Motivations systems.	4.25	4.20	4.30	3.92	4.20	3.50	0.74
Adequate financial resources for accounting development.	4.00	4.40	3.80	4.00	4.00	3.50	0.19
Using computer system for management accounting purposes.	3.50	4.33	4.10	4.00	4.00	300	0.17
Professional accounting bodies in Libya.	3.66	4.33	3.90	3.53	3.40	3.00	0.02
Accounting research in Libya.	4.00	4.53	4.10	3.64	4.60	3.50	0.01
Accounting education in Libya.	4.00	4.53	4.00	3.92	5.00	4.00	0.01
Co-operation between universities and LPCMs.	3.50	4.26	4.00	3.42	4.40	3.00	0.15
Economic changes.	4.00	4.80	4.70	4.64	5.00	4.00	0.01
Policy of Government	4.25	4.86	4.70	4.44	5.00	4.00	0.09

- The distribution of financial controllers' responses according to their work experience is significantly different at Professional accounting bodies in Libya, Accounting research in Libya, Accounting education in Libya and Economic changes as effecting factors of management accounting techniques.

Table 5-46: The Kruskal- Wallis test of the selected factors' influence on management accounting practices in LPCMs analysed by the work experience of respondents (services and projects managers' responses)

The Factors	Mean						Sig
	5-10 years	11-15 years	16-20years	21-25years	26-30 years	Over 30years	
Top management support.	4.50	4.00	5.00	4.42	4.66	4.00	0.59
Management accounting training programmes.	5.00	4.33	5.00	4.14	4.50	4.33	0.44
Motivations systems.	5.00	4.00	4.25	3.57	4.00	3.66	0.21
Adequate financial resources for accounting development.	4.50	3.66	3.75	3.57	4.50	4.33	0.36
Using computer system for management accounting purposes.	4.00	4.33	3.50	3.57	4.00	3.33	0.70
Professional accounting bodies in Libya.	4.00	3.66	3.00	3.16	4.33	3.58	0.50
Accounting research in Libya.	4.00	4.33	3.50	3.66	4.00	3.66	0.81
Accounting education in Libya.	4.00	4.66	3.75	3.42	4.50	3.33	0.05
Co-operation between universities and LPCMs.	4.00	4.66	3.25	3.33	4.00	4.00	0.38
Economic changes.	5.00	4.66	4.75	4.28	4.50	4.66	0.68
Policy of Government	5.00	5.00	4.75	4.42	4.66	5.00	0.69

The distribution of services and project managers' responses according to their work experience is significantly different at Accounting education in Libya as effecting factor of management accounting techniques.

5-5 Part four: General Questions

This part included some general questions which relate to the study's objectives.

5-5-1 The importance of management accounting information in LPCMs

Table 5-47 reveals that more than 92.4 % of respondents indicated that management accounting information in LPCMs is of above average importance and extremely important. Only 7.6 % of respondents ranked it as an average and below average level of importance of management accounting information.

Furthermore, the answer's median was 5 (*extremely important*) for importance of the management accounting information in LPCMs. These findings show that management accounting information is extremely important in LPCMs. Therefore, all respondents have asserted that information provided by the management accounting system is important for all LPCMs whereas the majority of respondents confirmed that management accounting information is important for all target respondents.

Table 5-47: The importance of management accounting information in LPCMs

Unimportant		below average importance		Average importance		Above average importance		Extremely important	
F	P	F	P	F	P	F	P	F.	P
0	0.0	5	4.2	4	3.4	19	16.1	90	76.3

Mean	Std. deviation	Minimum	Maximum	Median	Mode	Q1	Q3
4.6	0.75	2	5	5	5	5	5

5-5-2 The need to improve the practices of management accounting techniques

Table 5-48 reveals that 97.5 % of respondents indicated that LPCMs need to improve the current practices of management accounting techniques, 2.5 % of respondents pointed out that LPCMs do not need to improve the current practices of management accounting techniques because they prefer the manual technique rather than modern techniques.

Table 5-48: The need to improve management accounting practices

Yes		No	
Frequency	Percent	Frequency	Percent
115	97.5	3	2.5

5-5-3 The relationship between the budget and liquidity

Every payment and receipt of the LPCMs needs to be recorded in a cash-flow statement in order to keep the funds under control and to determine the liquidity of the agency as an important element for the LCPMs is to meet their cash payment responsibilities (Libya State, 1967). The budgets in Libyan government agencies need to forecast the extent to which revenues are sufficient to meet expenditures, how the government financed its activities and how it met its cash requirements, and therefore how public financial resources were managed in accordance with legislative requirements and government policy. Table 5-49 reveals that 99.2 % of respondents pointed out that there is a relationship between the budget and liquidity in LPCMs. 0.8 % of respondents stated that there is no relationship between the budget and liquidity in LPCMs.

Table 5-49: The relationship between the budget and liquidity

Yes		No	
Frequency	Percent	Frequency	Percent
117	99.2	1	0.8

5-5-4 The changes of budgetary control and budget preparation system since the suspension of sanctions imposed on Libya

Table 5-50 shows that 92.4 % of respondents stated that there were no changes in the budgetary control and budget preparation system after the suspension of sanctions imposed on Libya.

Table 5-50: the changes of budgetary control and budget preparation after the suspension sanctions on Libya

Yes		No	
Frequency	Percent	Frequency	Percent
9	7.6	109	92.4

5-5-5 Recent changes in the management accounting system

Respondents indicated that there have been recent changes to the management accounting systems in their LPCMs as follows:

- Libyan legislator is trying to move to modified cash basis in order to apply the accrual basis for determining the expenditures and revenues which are related with each fiscal year.

- More emphasis on controlling within budget allocations by pre-control which is applying by audit office and financial controller to achieve the control before completing expense transactions. Therefore, this type of control supports the control of expense and revenue transactions.

- Annual control visit undertaken by the General PC of Inspection and Control to verify completed transactions.

-More emphasis on developing the direct income of LPCMs from local resources.

- Central government asked PCMs to involve all spending departments in budget preparation and control to motivate them to achieve budget figures.

5-5-6 The weaknesses and strengths of the management accounting system of LPCMs

The main weaknesses of the management accounting system mentioned by respondents as follows:-

1- The budgetary control system is carried out by a government body to focus primarily on compliance with government regulations of budget allocation and controlling with limited or no emphasis on the efficiency and effectiveness of LPCMs 'performance, and therefore the LPCMs are still using traditional methods regarding the application of management accounting techniques.

2- The Libyan government regulations which are issued in 1967 regarding the budget preparation, budget implementation and budgetary control system should change to accommodate the changes in business environment.

3- Some LPCMs faced difficulties with the General PC of Treasury about a transfer of allocated amount for one item (chapter) to another item according to budget allocations.

4- There is a limited authority given to LPCMs for dealing with their revenue, whereas all LPCMs must transfer all collected revenue to the General PC of Treasury and the long procedures which had to be followed in the case of budget preparation, control and specially the implementation of development plans.

5- The planning department and service and project department need more responsibility in budget setting since they know more about priorities of these services.

6- Computers are not used for the application of management accounting techniques such as budget preparation and implementation and budgetary control system.

7- There is a shortage of qualified accountants in financial departments.

With regard to the strengths of the management accounting system the respondents indicated that the main strengths are:-

1- Revenue and expenditure are analysed by management accounting techniques according to their nature. For example, revenue is divided into revenue from municipal fees, taxes, grants, sales, penalties and other revenue, whereas expenditure is divided into salaries and rewards, operational, services, and so on. Management accounting techniques help to distinguish between capital and normal expenditures and to determine normal and abnormal revenues.

2- Revenue and expenditure budget play an important role for providing information for planning, controlling and monitoring.

3- Management accounting practices provides clear and accurate reports for performance evaluation of PCMs.

4- The positive and negative variances should be provided by using management accounting techniques such as budgetary control.

5-5-7 A copy of the results of this study

Table 5-51 reveals that 71.2 % of respondents indicated that they would like a copy of the results of study, while 28.8 % of them would not like a copy of the results of this study. This means that the majority of respondents need to know the results of study for understanding and realising what is really going on in their PCMs, as well as these results enhancing the validity and reliability of the questionnaire.

Table 5-51: The copy of study's results

Yes		No	
Frequency	Percent	Frequency	Percent
84	71.2	34	28.8

5-5-8 A query into questionnaire content

Table 5-52 shows that 96.6 % of respondents pointed out that they had no query into the content of the questionnaire, while 3.4 % of them had queries. This means that the majority of respondents understood the questions in the questionnaire. Therefore, these results also enhance the validity and reliability of the questionnaire.

Table 5-52: The query into questionnaire content

Yes		No	
Frequency	Percent	Frequency	Percent
4	3.4	114	96.6

5-6 Summary

This chapter has examined the current practices of management accounting techniques in 34 LPCMs through evaluation of the role of management accounting in providing information for planning, controlling, performance evaluation and decision making, and the factors that may have an impact on management accounting practices in LPCMs particularly.

The questionnaire survey used for obtaining the information was analysed by descriptive analysis. The Kruskal-Wallis test was employed for some questions to examine the important differences between the views of participants from LPCMs as independent sets (financial managers, financial controllers and managers of services and projects). For more emphasis the Kruskal-Wallis test was used as well to analyse the significant differences between the responses of respondents according to their work experience for achieving more accurate results. Table 5-53 summarises the significant results that came from the survey questionnaire respondents.

Table 5-53 A summary of the significant results of questionnaire

The objectives	Significant results
Investigating the current practices of budget preparation in LPCMs	- The budget committees are responsible for the budget preparation in LPCMs the basis of which is a cash process. - The starting point for annual budget preparation is the Average original budget for last 3 year using the traditional method (Line-Item Budgeting and incremental budgeting). - The main motives of budget preparation are compliance with government regulations, planning, and controlling and monitoring. - The budget preparation is not centralised at all or centralisation is limited. - The responsible departments for budget implementation are the audit office, financial department and financial controller.
Analysing the extent of use of budgetary control information in LPCMs	- The period for providing budgetary control reports are quarterly and on demand. - These reports are prepared manually rather than computerised. - The source of budgetary control reports was monthly reporting prepared by financial departments. - The main purposes of budgetary control information were to ensure that the actual expenditures and revenue in line with the proposed budget.
Assessing the extent of use of performance measurement methods in LPCMs	- The non-financial output measures were not included in the annual budget. - The performance indicators were not used for public services. The budget variance analysis and meeting the budget targets

	were used as the performance measurement techniques of LPCMs. - The General PC of Inspection and Control and General PC of Treasury are responsible for performance evaluation of LPCMs.
Examining medium and long-term financial planning in LPCMs	- The starting point of development plan preparation is the last 5 year development plan. - Five year development plans preparation which are prepared and implemented under supervision of the General PC of Planning and General PC of Treasury, but there is little attention paid by PCMs to medium plan (1 to 3 years plan).
To explore the factors that might have an impact on the management accounting practices in LPCMs.	- All listed factors in questionnaire have important affect the application of management accounting techniques within LPCMs these factors are (top management support, management accounting training programmes, motivations systems, adequate financial resources for accounting development, using computer systems for management accounting purposes, accounting research in Libya, accounting education in Libya, co-operation between universities and LPCMs, economic changes and policy of government).
To determine strengths and weaknesses of the current practices of management accounting techniques in use in LPCMs.	Strengths : - Revenue and expenditure are analysed by management accounting techniques according to their nature. - Revenue and expenditure budget play an important role for providing information for planning, controlling and monitoring. - Management accounting provides clear and accurate reports for performance evaluation of PCMs. Weaknesses: - The budgetary control system is carried out by a government body to focus primarily on compliance with government regulations of budget allocation and controlling but the focus on the efficiency and effectiveness of LPCMs 'performance is little, and therefore The LPCMs are still using traditional methods regarding the application of management accounting techniques. - The Libyan government regulations which are issued in 1967 regarding the budget preparation, budget implementation and budgetary control system should change to accommodate the changes in business environment. - The planning department and service and project department need more responsibility in budget setting since they know more about priorities of these services. - Computers are not used for the application of management accounting techniques such as budget preparation and implementation and budgetary control system - There is a shortage of qualified accountants in financial departments.

The significant results of questionnaire explained that the main purpose of management accounting practices in LPCMs is directed at budget preparation and budgetary control to comply with government regulations. Little attention is giving to introduce efficiency and effectiveness into LPCMs' performance. In addition, LPCMs are still using traditional methods regarding the application of management accounting techniques. These results also reported that there is little attention paid by LPCMs for the preparation of medium plans.

For obtaining depth information regarding the management accounting at LPCMs, the following chapter will discuss in-depth management accounting practices at the LPCMs through the use of semi-structured interviews conducted with officials in government bodies which have strong relationship with LPCMs about management accounting practices.

Chapter Six

Chapter Six

Semi-Structured Interviews Results

6-1 Introduction

The semi-structured interviews were conducted in private meetings with officials from the Libyan central government bodies which have a relationship with LPCMs. In an attempt to understand the nature of this relationship between the different levels of government and to elicit the views of these government bodies on the management accounting practices of LPCMs, interviews were undertaken over the period between December 2008 and January 2009. Each interview lasted has taken about 2 hours with the key officials depending upon the position of the person.

The aim of this chapter is to provide information about the management accounting practices of LPCMs. This chapter starts with the objective of interviews and the analysis of the collected data through the Content analysis technique. Interviewees were encouraged to give provide additional related information to this research. The additional information provided by the interviewees that provided clarification and confirmation to the earlier survey process. The interview process also reduced bias as the individuals in the Central Government agencies are one part of government who are involved in the Budget preparation and implementation, Budgetary Control and Performance Evaluation for LPCMs. The interview participants as central government officials provided a confirmation and clarification to the survey responses from LPCMs. The selection procedure for these participants is described in Chapter 4, Section 4-6-2-1.

This chapter is divided as follows; interview objectives, target interviewee selection and the analyses the findings of the semi-structured interviews. The findings cover a range of topics including the budget preparation in LPCMs, budget implementation in LCPMs, budgetary control information, controlling and performance evaluation, final accounts, development plans and the factors that affect the management accounting techniques in government bodies and LCPMS. From the interview process there is some additional information that interviewees' provided that clarifies some of the regulations and laws that are used in the preparation and administration of the budget and final accounts for the LPCMs and the Libyan state.

6-2 Objectives of interviews

Interviews were conducted at the Libyan government bodies' offices which are represented in the sample of interviewees and expected to provide information in private meetings. The interviews examined further matters related to the importance of information about the current practices of management accounting techniques and the factors that have an impact on its practices in LPCMs. Interviews are considered to be an efficient technique for collecting large amounts of data of on the current practices of management accounting techniques in LPCMs. The objectives of the interviews of the current study can be outlined as follows:

- Semi-structured interview is utilised to complement questionnaire's results in order to fill in any gaps that have been found in the questionnaire results.
- To obtain valid information and highlight the participant's views.
- To best understand the study's results and reduce bias risk.
- To provide comprehensive evidence for this study through providing in-depth insights about the research problems under investigation.

- To increase the response rate, by adding interview responses to questionnaire responses.
- To what extent the results differ and to enhance the reliability of responses.
- To provide a triangulation opportunity by gaining data confirmation through an additional collection method.

In addition the use of interviews is as a complementary technique for postal surveying as the interview process enables the researcher to gain clarification and ask additional questions about observations from the survey (Saunders *et al.,* 2009). The use of interviews in this study enabled the researcher to develop an overview of the policy and practices relating to LPCMs from Central Government agencies. It was important to have the Central Government viewpoint as these agencies have a top down view of the LPCMs and additional information sources not available to the individual LPCMs. The Central Government through its agencies, such as the General PC of Treasury, is are an important stakeholder in the management accounting practices of LPCMs as this is the controlling agency who issues the policy, guidelines and legislation which controls and develops the application of management accounting practices.

There are some difficulties in conducting interviews in the present research topic. In developing countries such as Libya, interviews are viewed as extremely intrusive and as a result may reduce the participant's willingness to participate. Additionally, there are difficulties of translating accurately the interviews, as the interviews were undertaken in Arabic. There are also some problems which the researcher faced specifically related to the Libyan context during the interview process within Libyan government bodies. These problems can be summarised as follows:

1- All interviewees have refused to be tape-recorded. This was to be expected as generally Libyans are not comfortable to have their views recorded due to the previous political climate and social history.
2- It was observed that most of the interviewees have had difficulty in defining specifying clearly their problems in general, more specifically, when they are asked about management accounting as financial officials because of unfamiliarity with the interviewer or it is was the first time they have ever participated in a research interview.
3- It was noted that most of the interviewees, have had the impression that the interviews may cover information regarding their institutions and that their response might threaten their position within the Central Government bodies. There was some reserve and on more than one occasion some hostility due to this impression.
4- The semi-structured interviews were more time consuming and therefore more costly than expected. The delays experienced in accessing some appointments highlight the reluctance and concerns that some participants had about participating in the interview process.

6-3 The target interviewees

The semi-structured interviews were conducted face to face with officials individually from Libyan government bodies in their own offices. These officials were selected based because of their close working relationship with LPCMs. The interviews hoped to obtain their perceptions and attitudes towards the current practices of management accounting techniques in LPCMs (for further information see chapter 2 section 2-12). In this regard, the researcher targeted 50 % of total possible participant sample due to

Libya's large geographical area and those bodies located in the different cities. The targeted participants in this study must have enough experience (not less than 5 years work experience) to be managers under *Law No 55* (1976) and detailed understanding as users of information obtained by the current practices of management accounting techniques within the LPCMs. The participants in the interviews were selected randomly in order to reduce the bias risk, and therefore the selection of random sample used the following procedure:

- Each target participant has an equal probability to be selected from the population.
- The potential participants were grouped together according to their agency and role and they only participated in one selection group.
- In each selection process, the researcher gave every target each possible participant was allocated an individual number, and therefore all participants' numbers have were written on small separate piece of papers separately. These papers were then put in a box. Half the papers were selected, and then those papers have put in a box and mixed well. From the available number of participant papers, half the papers were selected.

As a result of this process a total of two Budget Department, and two Taxation Department officials were selected from the General PC of Treasury. From the other Central government agencies, the participants were as follows: three officials from the Financial Department of the General PC, two officials from the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control and two officials from the Planning Department of General PC. Within the General PC of Treasury there were 18 officials associated with the financial services controls of

LPCMs who indicated that they were willing to be participants in the interview process. The random selection process was utilized to select nine officials as participants in individual interviews. The overview of the agencies and the timeline of the interviews can be seen in the table 6-1 below.

Table 6-1: The number of interviewees at the Libyan government bodies

Interview Date	Department	Governmental bodies	No. of interviewees
11/12/2008, 12 /12/2008	Budget department	General PC of Treasury	2
11,/12/2008 14 /12/2008	Taxation body	General PC of Treasury	2
04/12/2008, 06/12/2008, 08/12/2008, 10/12/2008, 21/12/2008, 25/12/2008, 28/12/2008, 30/ 12/2008, 31/12/2008	Financial services controls of LPCMs	General PC of Treasury	9
02 / 12/2008, 05/ 12/2008 23/12/2008	Financial department	General PC	3
06/ 01/2009, 07/ 01/2009	Financial Control and Performance Evaluation Department	General PC of Inspection and Control	2
02/ 01/ 2009, 04/ 01/2009	Planning department	General PC of Planning	2
Total			20

The target participants in this study have enough experience and are working in roles that utilize the information obtained by the current practices of management accounting techniques in LPCMs. In terms of work experience of the interviewees, according to the Information Centre for the General PC (2008) no participant had less than 5 years work experience as a reflection of the legislative requirements for their positions as officials in Central Government agencies. The full range of the interviewees work experience is listed below in table 6-2.

Table 6-2: The experience levels of respondents

Experience	Frequency	Percentage
Less than 5 years	-	-
5-10 years	10	50
10-15 years	4	20
More than 15 years	6	30
Total	20	100

6-4 Findings of the semi-structured interviews

This section analyses and summarises the interview data that was collected from the target participants. The interview data has been analysed using content analysis. The data was initially grouped the answers from the different interview transcripts were initially grouped by topic per the interview guide and allowing the guide to act a descriptive framework from which the content analysis was then undertaken. The content analysis is where key phrase words were identified and the interview responses were then regrouped based on the themes identified from the key words.

Overall, the interview results seem to confirm the questionnaire survey findings, as well as providing further evidence to support the issues emerging from the questionnaire survey. The LPCMs have a relationship with some central government bodies as mentioned above. In an attempt to understand the nature of this relationship and to explain the impact of the Central Government bodies on the management accounting techniques of LPCMs, 20 individual personal interviews were conducted with key officials in these Central Government bodies.

The questions of the personal interviews paid attention to role and opinions of interviewees on management accounting techniques and what is really taking place in the LPCMs and their opinions for improving the current practices.

6-4-1 The Budget preparation in LPCMs

The LPCMs undertake tasks of determining the scope of their public services that should be adopted within the next fiscal year according to the public needs, services and available resources. The LPCMs rely on directions approved by the General PC and issued by the General PC of Treasury and General PC regarding the budget issues.

All of the interviewees (20/20) in the various Central Government agencies explained the stages of budget preparation. Each LPCM has a budget committee which is responsible for preparing the LPCMs budget. This committee will discuss the proposed budget in individual meetings with the Secretary of the PCM (the city council leader) and different local departments of the LPCMs. After this liaison and negotiation, the budget committee for each LPCM will meet and discuss the proposed budget with the officials from the Budget Department in the General PC of Treasury the proposed budget matters in order to set the final budget proposal for each LPCM. Subsequently from the collection and discussion of the budget proposals of PCMs with the Budget Department officials, these proposals must be forwarded onto the General PC for approval. Once the General PC officials have approved the proposed budget; the budget proposals are submitted to the BPC (Basic Peoples' Congress). In the BPC each proposal will be debated and reviewed in relation to how public expenditures and revenue have been allocated in the proposed budget and when all issues have been dealt with, initial approval is granted by this parliamentary organisation. Once approval has been granted by the BPC the proposed budget is then submitted to the GPC (General People Congress) for final approval. If this upper parliamentary body does not approve the proposal it is returned back to the LCPMs to start the process again.

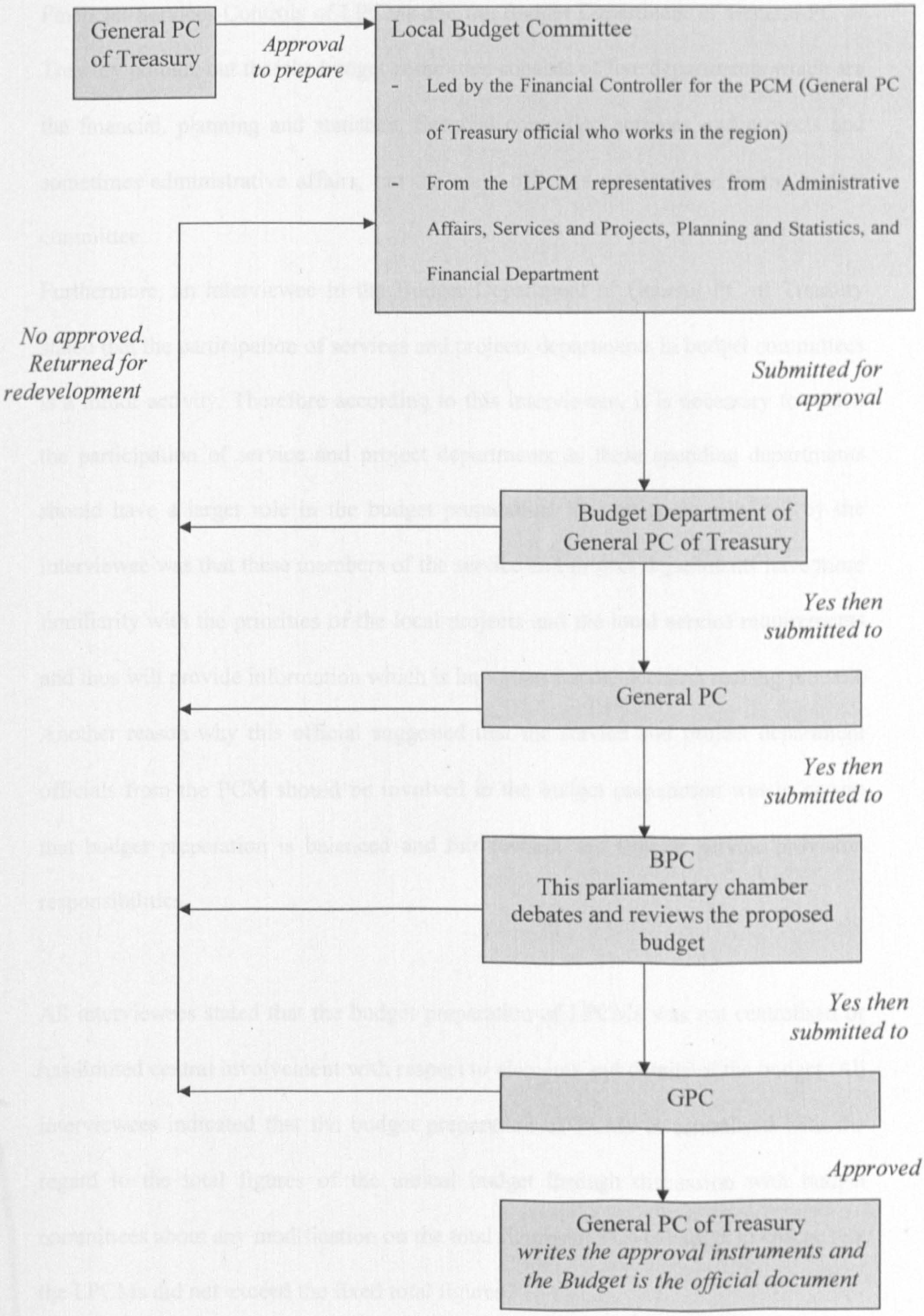
An interviewee in Financial Services Control of PCM outlined the responsibility of budget preparation as follows

> *"In order to prepare the proposal of annual budget the General PC of Treasury asked all PCMs by governmental regulations to set up budget committees which are responsible for budget preparation."*
>
> (Official in Az Zawiyah PCM)

The majority of the interviewees identified that the PCMs prepared the details of proposed budget through their local budget committees. While the initial responsibility for the annual budget preparation is with the PCM, the General PC of Treasury can make modifications in the total figures of annual budget through its discussion process with the individual budget committees. The General PC of Treasury authorises these budget committees to determine and prepare the details and elements of the annual budget but retains a final veto right over the proposal.

The Figure 6-1 on the next page is flow chart that describes the decision process that occurs during the Budget Preparation Process that has been described in this section of the interview analysis.

Figure 6-1: Flow chart of the Budget preparation process



With respect to the membership of budget committee the majority of interviewees in Financial Services Controls of LPCMs and the Budget Department of General PC of Treasury pointed out that the budget committee consists of five departments which are the financial, planning and statistics, financial controller, services and projects and sometimes administrative affairs, but the audit office is not included in the budget committee.

Furthermore, an interviewee in the Budget Department of General PC of Treasury stated that the participation of services and projects departments in budget committees is a minor activity. Therefore according to this interviewee, it is necessary to widen the participation of service and project departments as these spending departments should have a larger role in the budget preparation. The rationale provided by the interviewee was that these members of the service and project departments have more familiarity with the priorities of the local projects and the local service requirements and thus will provide information which is important for the decision making process. Another reason why this official suggested that the service and project department officials from the PCM should be involved in the budget preparation was to ensure that budget preparation is balanced and fair towards the various service provision responsibilities.

All interviewees stated that the budget preparation of LPCMs was not centralised or has limited central involvement with respect to elements and details of the budget. All interviewees indicated that the budget preparation of PCMs is centralised with the regard to the total figures of the annual budget through discussion with budget committees about any modification on the total figures of PCMs budget to ensure that the LPCMs did not exceed the fixed total figures.

An official from the Financial Department in the General PC highlighted how all the budgets from the LPCMs must stay within the total annual budget for the Libyan State. The General PC of Treasury will work with the various PCMs to ensure that the funding requirements of all the LPCMs do not exceed the allowance prepared in the state budget.

The bulk of interviewees indicated that there are some important issues should be taken into consideration during the budget preparation of PCMs. These issues are:

- The new circumstances.
- The actual achievement of previous year.
- Results of discussions with the PCMs.

All interviewees in the Financial Services Controls of PCMs and the Taxation Body of General PC of Treasury confirmed that there are some directions that should be considered during preparation of the revenue portion of the budget. These directions are following:

- The proposal of revenue must be made by the average of normal actual revenue in three previous years without a discount for government fees collection.
- The proposal of revenue should be as accurate as possible and depend on scientific approaches such as the use management accounting techniques, definite objectives of the PCM and take the economic and environment changes into consideration.
- The delayed revenue of the previous year should be taken into consideration during the revenue preparation of next fiscal year.

An interviewee in the Financial Department of General PC pointed out that

> *"The expected revenue has an effect on determining the new targeted projects for the coming year, and the adopted criterion for estimating revenue is the average of actual direct revenue in previous year. The results would be compared with the expenditures and actual revenue of the previous year, with explaining reason of increase."*
>
> (Official in General PC)

The vast majority of interviewees stated that the government revenue is dependant on the petroleum price that can fluctuate suddenly. Therefore this global market change can have a significant economic impact on the Libyan budget preparation. Therefore, General PC of Treasury requires that all Central Government bodies and PCMs must use an average developed from the last 3 years budget allocation values as starting point for the new budget proposal to achieve the principle of objectivity about the details and figures used in annual budget.

Interviewees (5/20) in the Budget Department of General PC of Treasury and the Financial Department General PC stated that the General PC of Treasury is the responsible agency for determining the starting point of budget preparation. The interviewees stated that the General PC requires all PCMs to begin the annual budget preparation cycle by using the original budget from the last financial year and use the allocation average (from previous 3 years) values with the addition of 20% or 25% of the total for expenditure inflation. The result baseline from three year average figures plus inflation allowance are then compared to the actual expenditure and revenue of the previous year, in order to determine and explain the reasons why there has been increase or decrease expenditure and revenue in the new budget proposal.

The interviewees in the Budget Department of the General PC of Treasury identified that directions are issued with regard to as the starting point of budget preparation to compensate for the fluctuations in the oil prices and the lack of local competition in the private sector. With the lifting of the embargo that was imposed on Libya, the development of the private sector has increased through the impact of the new oil exploration activities that has facilitated the entry of foreign firms in various business sectors in Libya. This led to increased competition which has had a profound impact on the instability or stability of prices. The current instability caused by the yo-yo effect on prices is expected to settle when supply and demand equilibrium.

All Interviewees explained that LPCMs used the cash basis for the annual budget preparation. In this regard, an interviewee in General PC of Treasury indicated that.

> *"Libyan legislators have tried to shift to the modified cash basis as the first step to apply accrual basis for budget preparation in some PCMs."*
> (Official in General PC of Treasury)

Interviewees in the Financial Department of the General PC commented that the Libyan legislators have attempted to move to modified cash basis in order to achieve complementary systems to what the some developed countries have in place regarding accounting systems in order to apply the accrual basis.

All Interviewees stated that LPCMs followed line-item budgeting and incremental budgeting of the budget preparation which are considered as the traditional method for preparing the public budget, and LPCMs have not adopted methods that are seen in developed countries such as Planning, Programming Budgeting and Zero-Base Budgeting.

Interviewees in the Budget Department of the General PC of Treasury and the Financial Services Controls of PCMs advised that the rationale for using the traditional method are to meet the activities carried out in last years with organisational objectives to control them, to analyse all changes of proposed activities in the annual budget and to reduce conflicts between LPCMs and the General PC of Treasury about the annual budget allocations.

Furthermore, an interviewee in the Financial Department of General PC pointed out that

> *"The traditional methods are widely used in all Libyan governmental organisations for preparing the annual budget."*
>
> (Official in General PC)

The majority of interviewees confirmed that the main reasons of budget preparation are compliance with government regulations, controlling and planning. In addition, all interviewees stated that Libyan financial law explained that the key purpose of budget preparation process is was to protect public funds from a negligence and waste. Therefore, to achieve that purpose, LPCMs use the proposed budget for controlling and monitoring all their financial transactions, for determining the extent of their compliance with government regulations and for preparing their future plans.

An interviewee in the Financial Services Control of PCM indicated that

> *"PCMs have to follow the instructions and regulations provided by General PC Treasury and General PC for achieving their main objective which is the protection of public funds this objective will be achieved compliance with government regulations, controlling, planning and performance evaluation therefore, these reasons are important for preparing the annual budget of PCMs."*
>
> (Official in Benghazi PCM)

Furthermore, all interviewees agreed that the Libyan government paid attention to the annual budget as a primary method to control public funds. Due to this constrained use of the budget, there is a problem as it leads to inflexibility in local management for running their activities. It encourages PCMs to overspend rather than saving their resources. The officials observed that the PCMs are pushed to spend the whole of their allocated amounts in the annual budget, as because if they spend less they face reductions in the next budget year.

All LPCMs are required to have approved budgets according to the interviewees. The interviewees state that without an approved budget, LPCMs are unable to meet their operational needs. The Libyan financial law (Libya State, 1967) requires that the annual budget must be prepared every year and it must be balanced. This budget should apply from the first of January and end in December of each year.

In this regard, interviewees in the Financial Services Controls of PCMs commented on the annual budget as follows.

> *"The annual budget is the backbone of all financial transactions in PCMs. This budget consists of the proposed revenue and expenditure."*
>
> (Official in Gharyan PCM)

> *"LPCMs are always preparing sub-budgets such as, monthly materials budget and monthly labour budget in order to assist the annual budget preparation as a comprehensive budget these sub-budgets are not required by government regulations."*
>
> (Official in Tripoli PCM)

> *"In order to achieve the protection of public funds all PCMs must prepare annual budgets by governmental regulations which consists of proposed revenue and expenditures amounts of PCMs. Therefore, monthly materials and labour budgets are part of expenditures which are prepared in the annual budget. The cash budget is used in PCMs as a control method of the liquidity."*
>
> (Official in Al Jifarah PCM)

The majority of the interviewees (18/20) stated that the revenue and expenditure budget as annual budget was very important budget for PCMs. In addition to interviewees indicated that the cash budget is used in PCMs to control the liquidity.

Interviewees in the Budget Department of the General PC of Treasury pointed out that the Libyan financial law stipulates that an annual budget consists of the expenditure part and the revenue part.

> *"An annual budget consists of two parts, first part is the expenditure and second part is the revenue."* (Article. 6 of financial law)

All interviewees in the Financial Services Controls of PCMs referred to Articles 1, 2 and 3 of budget and accounts regulation in Libyan Financial Law 1976 indicating that the annual budget includes the proposed revenue and expenditures. Expenditure is divided into three sections. The three expenditure sections are: Salaries and Rewards, Operational Expenditure and Services expenditure. While the revenue side was divided according to their types such as: taxes, services income, penalties, registration fees, documentation fees, ports revenue and others, incomes from agriculture, housing and financial support from state revenues for instance oil revenue.

The interviewees also said that the budget divisions mentioned above serve many purposes such as preparing and control of expenditure, control over income collection, coordinate control reports and help to prepare comparative financial statistics.

An interviewee in the Budget Department of General PC of Treasury also observed that some of the incomes that are proposed in the budget might be collected and some of them may not be collected and this lack of tangibility can create problems. Regarding, expenditures proposal, the same interviewee said that it is possible to transfer amounts from item to item, even though, what was originally allocated in budget might not be enough to spend on as the PCMs plans to. Also necessary expenditure might arise and it is not allocated during budget preparation, so it is necessary to make amendments in the two cases by agreement between General PC and PCMs.

Interviewees in the Financial Control and Performance Evaluation Department of General PC of Inspection and Control said that unfortunately some of PCMs have not followed some directions issued by the General PC of Treasury that are attached with a decision issued from the General PC regarding the pricing of services. PCMs do not have authority to change the pricing of public services. Moreover there are political economic changes of Libya, such as privatisation of some public activities, the fluctuations of prices and the lifting of international sanctions imposed on Libya, but laws and regulations of budget preparation have not experienced any legislative changes as the current legislation was issued in since 1967. There have been some minor amendments but these have not been fully implemented and further revision is required to meet the new structural needs with the privatisation of state agencies.

6-4-2 The budget implementation in LPCMs

The interviewees reported that the GPC always issues a legislative act of budget approval before the beginning of the fiscal year to allow the General PC to start the budget implementation according to the procedures of spending and income.

The majority of the interviewees (19/20) stated that the stages of budget implementation begin when the Secretary (Prime Minister) of General PC issues a letter of authority which delegates the implementation of the budget to the General PC of Treasury. The General PC of Treasury on receipt of the authority then issues the funds by the Budget Department to the Financial Services Control of each PCM. The Financial Service Control will then distribute the funds to the various agencies under its jurisdiction including the LPCMs and other local public organisations which are independent from the LPCM budget. In addition, all interviewees explained that the General PC of Treasury issues a permission to start revenue collection and then the collected revenue will be transferred to the General PC of Treasury. Copies of revenue collection permission letter will be sent to the General PC of Inspection and Control, and the General PC.

An interviewee in the Financial Services Control of PCM indicated that

> *"The General PC of Treasury is responsible for organising the budget implementation according to the Libyan financial law issued on 24/10/1967 and its Regulations of budget and Accounts issued on 10/4/1973."*
>
> (Official in Al Marj PCM)

All interviewees said that the General PC of Treasury is responsible for all financial procedures including expenditure and revenue, whereas it controls all procedures by financial controllers as representative of the General PC of Treasury in the LPCMs to assure that PCMs do not exceed the budget allowance.

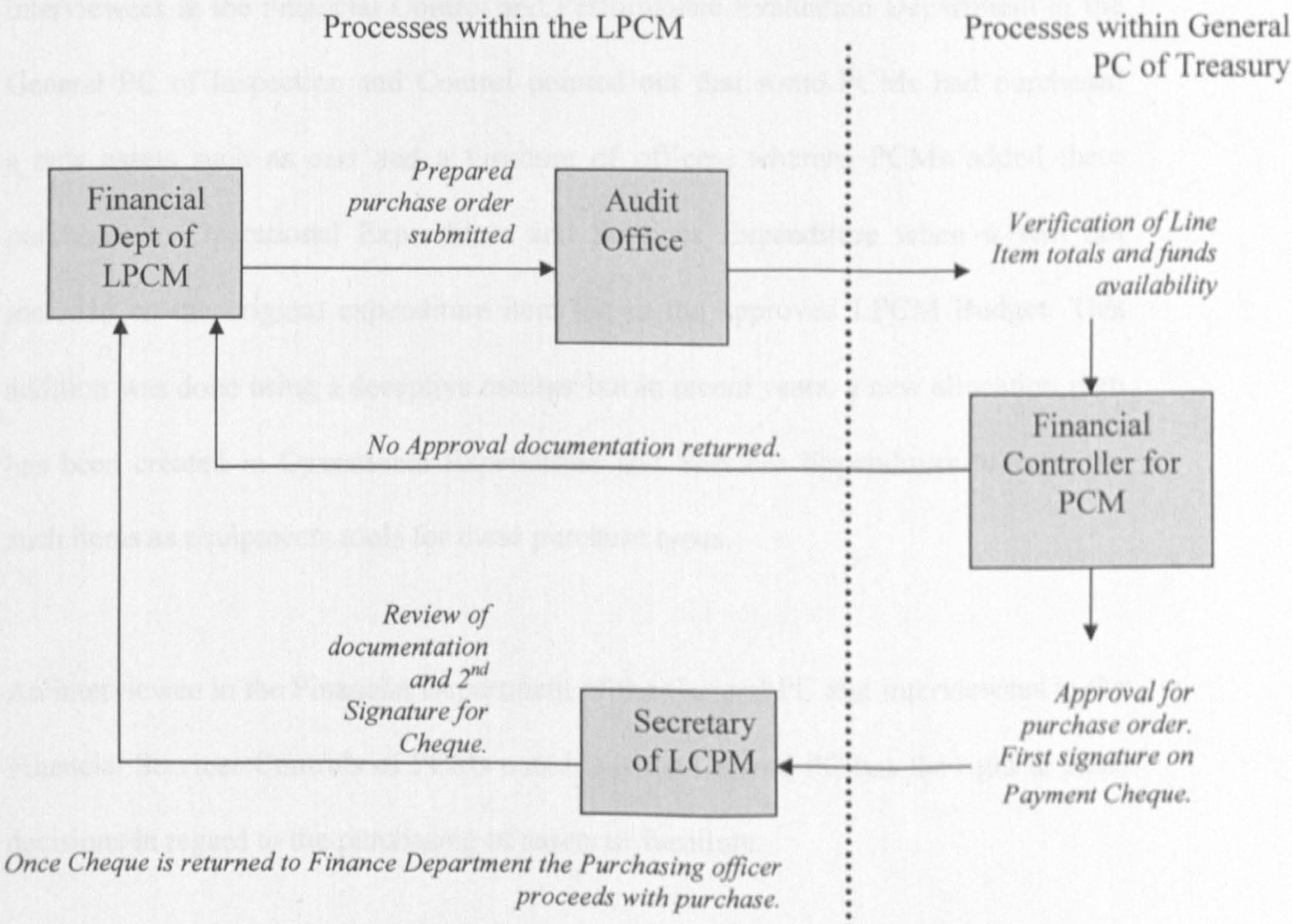
The majority of interviewees indicated that the main responsible members for budget implementation are: the audit office, the financial department, the financial controllers, while the planning department, service and project department and administration affairs have less responsibility in budget implementation.

An interviewee in the Budget Department of the General PC of Treasury and one interviewee in the Financial Services Control in PCMs explained that all transactions which are related to the transfers from one line item account to another item account must be checked by the Budget Department in the General PC of Treasury and approved by the General PC (Prime Minster's Office). In this regard the Budget Department in the General PC of Treasury receives from LPCMs legal application forms for permission to exceed budget allocations on one or two items, and then these applications must be submitted to the General PC for approval. All applications must be sent by the Financial Controllers of PCMs (who are General PC of Treasury officials) and the procedures of budget implementation must be approved by them.

The interviewees from the Financial Services Control of PCMs and the Financial Department of the General PC advised that there are strict spending procedures related to LPCMs. The interviewees described a complex procedure where the Financial Department of the LPCM prepares a purchase order which is then sent to audit office to verify that all steps have been completed properly and that the expenditure is included in the budget. The audit office will then forward the purchase order onto the financial controller who checks it again to ensure that all documents meet legislative requirements, the expenditure amount has been included in the budget and that allocated budget amount for the line item has not been exceeded. Once the financial controller is satisfied that the purchase order meets their legal requirements they stamp approval and provide the first signature on the payment cheque. The Financial controller then forwards the documentation and cheque onto the Secretary for the PCM (city council leader) who provides the second signature to the cheque check and issues it to the purchasing department. The purchasing department then completes the transaction.

Almost all interviewees agreed that all financial transactions should be checked before and after the expenses processes to obtain feedback, identify variances and evaluate the performance of LPCMs. The internal and external control processes for line item transactions during the budget implementation is illustrated as follows on the next page in Figure 6-2.

Figure 6-2: Financial Transaction Approval Process by Line Item



The majority of interviewees indicated that funding for Salaries and Rewards, and Operational Expenditure and Services Expenditure is financed to the PCMs in four quarters. At each quarter, the General PC of Treasury transfers the quarterly funds to the Financial Services Control of PCMs then these amounts will be transferred to the PCMs. This process is called the financial remittance. An interviewee in the Financial Services Control of PCMs stated that the main reasons for the quarterly approach are:

- To make sure that PCMs complete the financial transactions according to the allocated budget figures and financial regulations.
- To monitor and control public funds.
- To obtain budgetary control reports at an appropriate time.

Interviewees in the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control pointed out that some PCMs had purchased a new assets such as cars and a furniture of offices, whereas PCMs added these purchases to Operational Expenditure and Services Expenditure when it was not included on the original expenditure item list in the approved LPCM Budget. This addition was done using a deceptive manner but in recent years, a new allocation item has been created in Operational Expenditure and Services Expenditure to cater for such items as equipments tools for these purchase types.

An interviewee in the Financial Department of the General PC and interviewees in the Financial Services Controls of PCMs noted that the General PC has the right to issue decisions in regard to the purchasing of assets or furniture.

6-4-3 Budgetary control information

When discussing budgetary control information procedure all interviewees informed the researcher that the purpose of this process was to control the budget allocations to assure ensure that these allocations are directed to the specified targets in budget. Additionally budgetary control information is utilised to control actual revenue and expenditure in PCMs to ensure the accuracy of real figures used in financial transactions. The overall aim of budgetary control system is to prepare reports for ensuring the compliance with government laws rather than controlling and monitoring the performance of PCMs.

In this regard, interviewees in the Financial Department of General PC, the Budget Department of the General PC of Treasury and the Financial Control and Performance Evaluation Department of General PC of Inspection and Control stated that all government organisations are required by government regulations to provide regular reports. As mentioned earlier, the interviewees stated that financial remittance is used to encourage LPCMs to provide quarterly reports and this helps the PCMs provide reports quarterly to Central Government Agencies. The PCMs may also be required to provide some reports annually or complete on demand requests. When asking for clarification interviewees informed that General PC receives reports quarterly and sometimes on demand, General PC of Treasury receives reports quarterly and sometimes on demand and General PC of Inspection and Control receives annual and sometimes on demand reports.

An Interviewee in the Budget Department of General PC of Treasury said that the budgetary control reports follow the legal form, which has two columns. The right hand column consists of actual expenditures while the left hand column consists of actual revenue. The report forms including information about salaries and awards, operations expenditure, services expenditure and income items. The forms are prepared by each financial department and under the supervision of financial controllers in each PCM. These forms are then submitted as reports to Central Government Agencies such as the General PC. This information must be accurate but sometimes is not always provided at the scheduled time. This delay in reporting, according to the General PC of Treasury, General PC of Inspection and Control and the General PC interviewees, might be as a result of a shortage of qualified personnel in the accounting field in the LPCMs. In this regards the General PC of Treasury has linked PCMs' reports with their financial remittances as an incentive program to encourage PCMs to submit the required reports in a timely manner.

Interviewees of in the Budget Department of General PC of Treasury and the Financial Services Control of PCMs pointed out that the regular reports are sometimes sent and received via phone or fax from PCMs to the Budget Department in the General PC of Treasury, and the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control. The Budget Department in General PC of Treasury used these reports as guide of budget preparation for the coming year, while the General PC of Treasury has utilised the budgetary control information to control the actual revenue and expenditures of PCMs. The interviewees also indicated that, all financial departments of PCMs are required by governmental regulations to prepare reports for budgetary control on a monthly basis which are then approved by the financial controllers. The financial controllers who submit quarterly or on demand reports to the General PC, the General PC of Treasury and the General PC of Inspection and Control.

The use of computers to prepare the budgetary control reports is very limited. Interviewees in the Financial Department of General PC, Budget Department in General PC of Treasury and Financial Services Controls of PCMs pointed out that computers are not used to prepare budgetary control reports, but just used for printing out correspondence. The interviewees also indicated that the General PC is starting to make efforts towards changing from traditional paper accounting systems to computerised systems in PCMs through the purchase of computers, but this has not been endorsed by training programs to support the implementation of computerised systems.

Interviewees of the Budget Department in General PC of Treasury, and Financial Control and Performance Evaluation Department of General PC of Inspection and Control asserted that they receive regular actual revenue and expenditure reports from PCMs for the purpose of comparison.

All interviewees indicated that the development of the budgetary control information system was one of the management accounting practices that has slowly been implemented within LPCMs. However, the interviewees state that the LPCMs have asked the General PC to address the current system difficulties through research in the management accounting field and to take an advantage of practices applied in Western countries for developing the application of management accounting techniques in local governments.

An interviewee in the Budget Department of General PC of Treasury said that the financial legislation seeks to unify the registration method of government accounts and unify the period of accounting reports. The reasons of this are for monitoring, analysing and comparing PCMs in order to take the appropriate administrative decisions towards positive and negative variances. On the other hand, interviewees in the Financial Services Control of PCMs indicated that there is no accounts manual for PCMs accounting leaving decision making process that they utilise to be based on their previous experience in this professional role.

Interviewees in the Taxation Department and Budget Department of General PC of Treasury pointed out that the actual revenue reports of PCMs are analysed and compared with the proposed revenue of current years. Therefore, the General PC of Treasury and General PC of Inspection and Control investigates increases or decreases in the actual revenues (positive and negative) and consults with PCMs to ensure that logical and legal decisions have occurred along with guidance on the appropriate manner for the correction recording for the variance.

Interviewees in the Taxation Department of General PC of Treasury indicated that the main reasons that LPCMs experience variance between the proposed and actual revenue is the absence of motivation systems in PCMs to encourage their staff to increase their productivity, as well as the shortage of professional employees who can undertake for collection revenue within PCMs.

6-4-4 Controlling and performance evaluation

The control system in LPCMs is divided into two main types, internal and external control according to the interviewees. The internal control is implemented by the audit office as pre-audit process which is supported by the use of external control, which is divided into pre-control and post-control of spending. Pre-control auditing is implemented by financial controllers while post-control auditing is implemented by the General PC of Inspection and Control. Consequently, this demarcation of roles is required to ensure independence and objectivity of control.

The interviewees in the Financial Services Control of PCMs indicated that the Financial Control and Performance Evaluation Department of General PC of Inspection and Control and the Budget Department of General PC of Treasury are responsible for performance evaluation of PCMs but there is a shortage of both financial resources and qualified manpower to perform evaluations by these government bodies.

With respect to the non-financial output measures an interviewee in the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control stated that the non-financial output measures are not included in the annual public budget. Interviewees in the Financial Services Control of PCMs confirmed that non-financial reports are not required by government regulations, except for statistical purposes, but an interviewee in the Financial Services Controls of LPCMs confirmed that there are no compulsory regulations regarding attached non-financial output measures in annual budget, in spite of their usefulness for evaluating LPCMs' performance. All interviewees described that LPCMs use reports for measuring the proportion fulfilment of their projects, for example the table of quantities which are attached with contracts, length of constructed roads, number of houses built and schools and others building projects. This measurement of performance is just counting the number of completions but is not confirming the value for money or the effectiveness of the completed project

An interviewee in the Financial Services Control of PCM pointed out that

> *"There is a need to establish the internal controller [*audit office*] as a member in the budget committee of PCMs in order to implement the main corrections of budget variances in their performance."*
>
> (Official in Tripoli PCM)

Interviewees in the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control confirmed that responsibility accounting is not applied in all PCMs due to the absence of organisational structure which defines the lines of responsibility and authority, but there are efforts and pressure by the General PC of Inspection and Control for improving the accountability of all government officials.

Interviewees in the Budget Department of General PC of Treasury and Financial Control and Performance Evaluation Department of the General PC of Inspection and Control stated that performance evaluation of PCMs tends to focus on the expenditure of LPCMs. Therefore, Central Government considers that the internal measurement for efficiency and effectiveness of LPCMs performance is dependent on the protection of public funds within the budget allocations. The interviewees also indicated that performance indicators are not used for public services. In this regard Libyan government has privatized some public services to improve the efficiency and effectiveness of services and to reduce public expenditures. Therefore the interviewees state that these indicators are important to facilitate the performance evaluation of all government bodies and PCMs.

Interviewees in the Financial Control and Performance Evaluation Department of General PC of Inspection and Control and the Budget Department of General PC of Treasury stated that they have faced some constraints, such as the absence of appropriate standards or indicators prepared by an independent body for PCMs' services, access to information in PCMs, and the lack of authority to implement corrective decisions. The interviewees from the General PC of Inspection and Control emphasised that there was a lack of response from higher authorities to implement their recommendations. However, the General PC of Inspection and Control discusses any variances with PCMs to reform these variances, additionally all variances have to be presented to BPC and GPC. Both of these parliamentary agencies have the authority to repudiate and admonish the government officials (local and central) who were responsible for expenditure or income variances and have developed reforms to increase the accountability of government officials.

In addition the interviewees in the Financial Services Controls of PCMs, Financial Control and Performance Evaluation Department of General PC of Inspection and Control and Budget Department of General PC of Treasury confirmed that the measurement performance techniques are employed by General PC of Inspection and Control and General PC of Treasury and PCMs and that these techniques are budget variance analysis and meeting the budget. This group of interviewees also confirmed that the comparison of the results between PCMs with each other is used by the General PC of Treasury as performance measurement technique in order to determine variances for budget implementation and performance evaluation.

Interviewees in the Financial Control and Performance Evaluation Department of General PC of Inspection and Control and interviewees in Budget Department of General PC of Treasury summarised the essential weakness of performance evaluation of PCMs as follows:

- There is lack of coordination between the priorities of PCMs' projects.
- Inadequate specifications and conditions of the contracts.
- Absence of practical measures to facilitate the procedures of providing services to people.
- The appointment of the administrative leadership was corrupted due to the bias in filling posts which affected a management performance.

- LPCMs recruited new employees without taking into consideration the work requirements, which led to an inability of PCMs budget to pay salaries of the appointed employees, and therefore this created a financial liabilities and burdens on PCMs' budgets.
- The LPCMs do not take legal actions against the unfinished projects or projects which failed to start.
- The LPCMs never take any action regarding enquiries issued by the General PC of Inspection and Control with respect to the budget implementation and high prices of contracts.

All interviewees indicated that the LPCMs were not allowed to determine their appropriate priorities through every stage. This certainly led to confusion within those municipalities. Further, the interviewees advise that performance evaluation will become more effective if it implemented by PCMs with coordination with the General PC of Inspection and Control. Therefore, the lack of performance can be more obvious for correction if discovered earlier by the PCMs themselves.

When the Financial Control and Performance Evaluation Department of General PC of Inspection and Control and the Budget Department of General PC of Treasury interviewees were asked for clarification about the weakness in performance and performance evaluation a key point was repeated made by this group of participants. This group of interviewees report in relation to employment that there is strong social relationship which results in family and cultural links being utilised to assist in gaining appointment by individuals. The criticism by the interviewees was that the administrative leadership was corrupted due to this bias and individuals are appointed without the necessary skills to complete the work thus impacting on the management performance.

The majority of the interviewees (19/20) confirmed that over the last two decades political programs in Libya overshadowed managers and the management of organisations. During this period the Libyan government gave priority to political considerations rather than economic aspects when making decisions about PCMs and their operations.

6-4-5 Final Account

This is the last stage of budget which monitors the budget allocations in the end of fiscal year to assure that these allocations are directed to specific aspects and to measure the achieved aims of government policy.

Almost all interviewees (19-20) confirmed that the Financial Services Controls of PCMs are responsible for preparing the final accounts in accordance with the policy instructions of the General PC of Treasury. Therefore, the Financial Services Controls of PCMs register the actual revenues and expenditures of the PCMs at the end of fiscal year in the final accounts. This process for the final accounts is a routine annual reporting event.

In this respect an interviewee in the Financial Services Control of PCM stated that

> *"The final account is a statement of all actual revenues and expenditures for the end of the fiscal year. It is possible by this account to make comparisons between the actual figures which are included in this account and those of the annual budget proposals to determine the accuracy and reality of figures for using them in the next year's budget preparation activities".*
>
> (Official in Gharyan PCM)

Interviewees in the Financial Services Controls of PCMs explained that the final account preparation in the Financial Services Controls of PCMs has three stages. First stage, all PCMs prepare monthly statements of actual revenue and expenditure according to the budget items in addition a brief of cash receipts and payments which is used in order to determine the liquidity ratio in PCMs. The second stage, the Financial Services Controls of PCMs use the legal traditional manual ledger records for all the collected data by these statements which are prepared by PCMs and their bank statements. The Financial Services Controls of PCMs in the final stage prepare the final results manually by a specified statement form which details proposed revenues and expenditures and actual revenues and expenditures. This form in addition also determines specifies the surplus or deficit and their reasons for their occurrence. Further analytical and adjustment statements are attached with the final account to provide clarification.

6-4-6 Development Plans

In respect to the development plan all interviewees stated that the development plan is usually called the Five Year Development Plan because its duration is for five years. Interviewees in Planning Department of General PC of Planning clarified that the previous Development Plan is considered during the preparation of the next development plan for all PCMs. The reasoning behind why the General PC of Treasury and the General PC of Planning are using the previous Five Year Development Plan as a starting point for the new Development Plan is to unify the preparation process across the various PCMs, improve the monitoring of the budgeted figures, and to ensure that that the objectivity principle is applied to make fair allocation of resources among the PCMs. In this regard, an interviewee in the Financial Services Control of PCM stated that

> *"The PCMs comply with the directions issued by General PC of Treasury and General PC of planning. These instructions are probably to face*

fluctuations in the prices which were resulted the lifting the embargo that was imposed on Libya which facilitates the entry of foreign firms in various fields and therefore created the competition which has had a profound impact on the instability of prices."

(Official in Gharyan PCM)

All Interviewees stated that the Development Plan was be prepared by the General PC of Planning, which contains huge projects according to proposals submitted by PCMs. This plan is submitted to the General PC and BPC to review and make comments on it, and it is then send on to the GPC for approval. After that, the development plan will be transferred to the General PC of Treasury so that this department can formally implement the spending proposals according in accordance to the various acts and regulations. The implementation processes will not be completed without approval by General PC of Planning.

An interviewee in the Planning Department of General PC of Planning pointed out that before preparing the development plan in each PCM, the General PC of Planning will issue directions regarding how development plans will be prepared by the PCMs and what specific period of time will be covered by the developed plan (actual dates), and therefore the Five Years Development Plans preparation process is centralised. Interviewees in the Financial Services Controls of PCMs stated that the General PC of Planning requires that all LPCMs must to prepare Five Year Development Plans according to the General PC of Planning's directions. Some of LPCMs prepare a medium plan (that can cover 1 to 3 years in a plan) according to the period of government contracts which are made with the private organisations for construction, maintenance, and so on.

The majority of interviewees (17-20) pointed out that the Act No. 8 of 1970, Article 7 organises the affairs of the development plans and the financing of these plans. Also the interviewees pointed out that these plans aim to cover capital expenditures from allocated amounts by the following sources:

- From Government oil which is divided as follows: (15%) for the general reserve and the rest (85%) is divided to (30%) of public budget and (70%) of development budget.
- Amounts allocated from Government loans to the LPCMs.
- Government allocations according to any international agreements with international organisations.
- Any other revenue amounts available for development purposes.

All interviewees agreed that the main aim of development plan preparation process was the measurement of the achievement rate in PCMs projects, by comparing actual rate of completion with desired rate of completion and to control the expenditure to achieve the various projects.

An Interviewee in the Financial Services Control of a PCM and an interviewee in the Planning Department of the General PC of Planning expanded this point about Development plan purposes when they stated that that all financial transactions of development plans are sent from PCMs to the Financial Department of the General PC to confirm the remain balance totals and authorisation for making payments based on the available balance totals. |

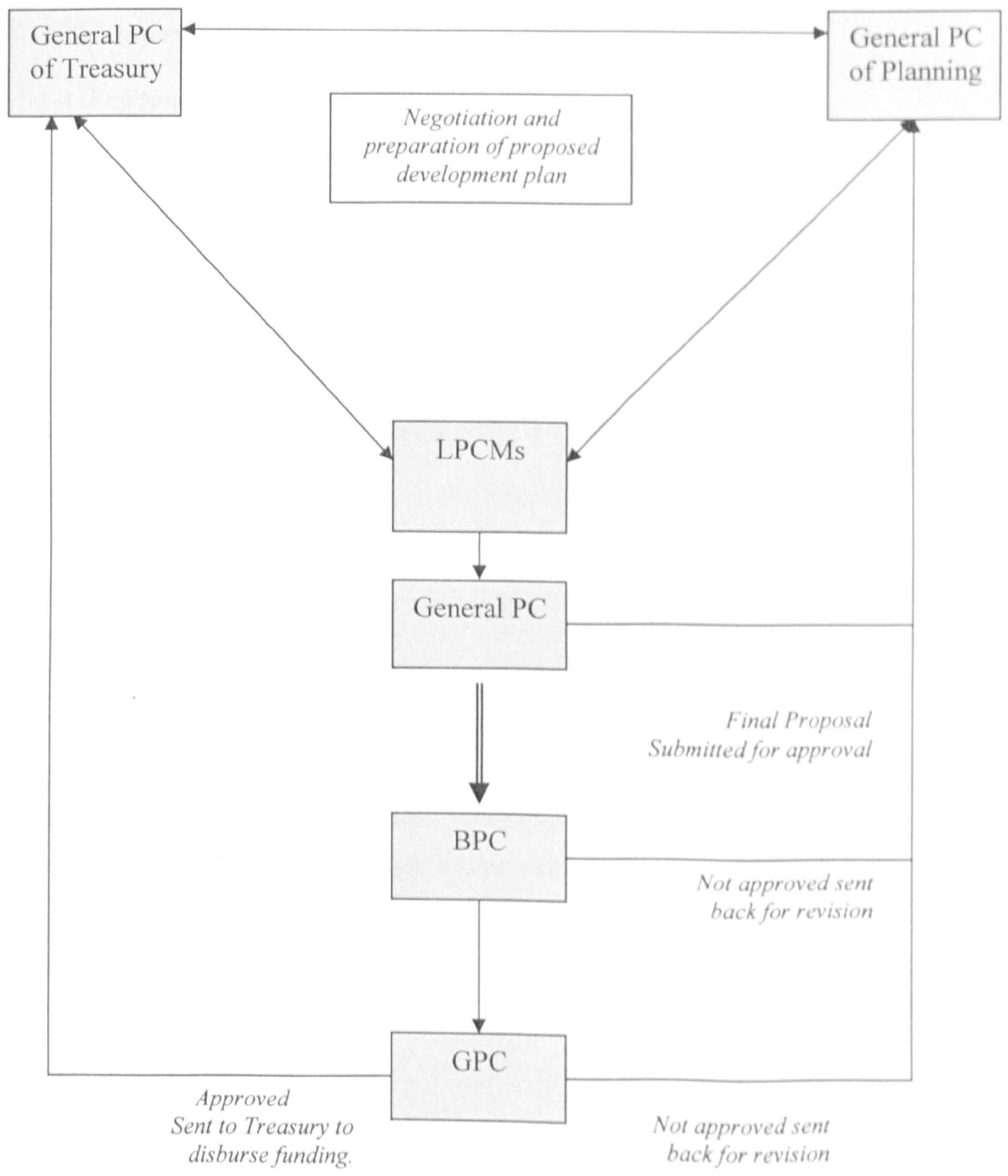
In the implementation of Five Year Development Plan, interviewees in the Financial Department of the General PC and in the Planning Department of the General PC of Planning explained that the Financial Department of the General PC registers the payments when transferring them from the General PC of Treasury to PCMs then these amounts will be paid according to budget allocations.

The majority of interviewees stated that the new programmes during the Five Year timeline may be implemented by LPCMs. New programs are added to the existing program list and a new order of prioritisation occurs for all the proposed development programs with the PCMs. Before a new program is activated the proposals are sent to both the General PC of Planning and General PC for approval. Once the approval has been granted it can then be implemented by the LPCM. The General PC of Treasury will transfer the funding to support the new development program to the LPCM but this organisation will not have the authority to spend this money until the proposed payments have been checked against the budget allocation in the Planning Department in General PC of Planning to confirm the balance of the allocation and then stamp payment transaction document for approval. Once the transaction document is granted approval, it is then transferred to the Financial Department of General PC for registration and approval that then the transaction can be completed. Approval for transaction completion is sent to the PCMs for registration and this triggers the issuing of a cheque which is signed by a Financial Controllers and the City Council Leaders. All Interviewees indicated that both of PCMs and General PC register the actual expenditures within their records according to the periods of these programmes.

The Central Government interviewees agreed that a small number of PCMs have performance indicators that use scheduled timelines, or workflow completion to payment approvals. These performance indicators are implemented after the development plan process.

On the next page is Figure 6-3 that illustrates the consultation process between the two central government departments, the General PC of Treasury and the General PC of Planning, and the LPCMs. Once the negotiation has produced a draft it is submitted to the General PC for review before presentation to the parliamentary bodies.

Figure 6-3: Development and approval process for Development Plans



6-4-7 The Factors affecting applications of management accounting techniques

One of the essential motivations of making personal interviews was to consider some factors affecting management accounting techniques of the LPCMs and accounting in Libya generally. Through the content analysis of the interview transcript it was apparent that these factors were divided into internal and external groupings.

6-4-7-1 The internal factors

6-4-7-1-1 Top management support

This factor was included in the questionnaire. The personal interviews made with the all target interviewees explained the importance of top management support, especially on the management accounting techniques of PCMs. The interviewees highlighted that top management support is the main factor for improving the accounting system generally and management accounting system in particular. An interviewee in the Financial Department of General PC stated that:

> *"Support or the lack of support for management accounting practices is dependent on the decisions of top management. Whereas, to improve management accounting practices in PCMs should be a top manager that is interested in accounting information and he has enough knowledge about the benefits of planning, control and performance evaluation."*
>
> (Official in General PC)

Interviewee in the Budget Department of General PC of Treasury said

> *"We have priorities in the government sector, like any sector, but the improvement of accounting system is not amongst these priorities, and therefore the government sector should take in consideration the available information by accounting system for making the right decisions."*
>
> (Official in General PC of Treasury)

When clarification was asked about top management, interviewees in the Budget Department in General PC of Treasury and Financial Services Controls of PCMs advised that some of the LPCMs claimed their top management agencies such as the General PC and the General PC of Treasury should give attention to the management accounting practices used in LPCMs as there are problems in the system created by the difficulties that the recent political and economic changes in the Libya environment.

6-4-7-1-2 Financial resources for accounting development and the skills of using computer.

The majority of interviewees (19-20) stated that financial resources for accounting development and use of computers have impact on the accounting system in general and management accounting system in particular. The main issues identified by the interviewees are the lack of skilled staff able to use computers and individuals with English language skills.

An interviewee in the Budget Department of General PC of Treasury said

> *"There is an item in the annual budget for buying modern facilities, but the problem is that there are no qualified employees for using computers. Therefore, the top managements have appointed the unsuitable person in the unsuitable place. The social relations play a fundamental part of appointing employees. However, top managements need to make plans for taking this matter into consideration and benefit from the experience of developed countries such as UK and USA."*
>
> (Official in General PC of Treasury)

When clarifying the skills issues an interviewee in the Financial Control and Performance Evaluation Department of General PC of Inspection and Control and interviewees in Financial Services Controls of PCMs indicated that these skills were not only important in the development of agencies but they would also important for the development in the application of management accounting techniques.

6-4-7-1-3 Training programmes and motivations systems.

All interviewees emphasised the importance of training programmes in all government bodies and especially within PCMs to address skill shortages. In this regard the Libyan government established a new body which is called the General PC of development and training. Yet, the majority of interviewees pointed out that this body focused on the engineering professions but it had neglected the administrative and accounting professions. Interviewees also confirmed the importance of incentive systems in PCMs, but unfortunately these motivational schemes were not used or tied to performance outcomes.

An interviewee in the Financial Services Control of PCMs advised that there are internal training courses organised by General PC but these courses are not fit for purpose as they are not meeting the skill shortage needs or enable the individual to utilise their new skill set in the workplace as they may not have access to computers in their workplace.

Regarding the incentive systems all interviewees stressed that they perceived that the current training and incentive systems of PCMs have a fundamental effect on the application of management accounting techniques in LPCMs and other government institutions.

An interviewee in the Financial Services Controls of PCM said that

> *"Our salaries and motivations systems are so low to suit our current living standards. In fact, the state tried to solve this problem by increasing salaries but it lifted the support of basic goods, this matter may not encourage employees to work seriously."*
>
> (Official in Tripoli PCM)

6-4-7-2 The external factors

6-4-7-2-1 Accounting Education in Libya and Co-operation between universities and LPCMs

Interviewees reported that the current accounting curriculum in Libyan Universities do not have teaching content that meets the new environmental factors in today's economy as a result of the Embargo, change in market structure and the increasing amount of private enterprise. Due to the discrepancy between the theory presented in education accounting students are struggling to cope with the new challenges and problems they are encountering in practice. A key theme in the responses was that accounting education has an important role in the application of management accounting techniques. To address this skill challenge the interviewees reported that the current Development plan for Education has funding to support foreign study programs to improve the skill sets of existing staff and to learn for developed countries. Additional funding has been provided to researchers to encourage them to study the current issues that Libya faces.

Interviewees in the Budget Department and Taxation Body of General PC of Treasury also stated that accounting profession looks like other profession groups such as engineers. These interviewees identified that accounting education for professionals needs to connect between the practical application and theoretical aspects and this was important to newly qualified professionals working in industry. They also noted that the Libyan Universities are not active in management accounting research, whereas for example, this was the first time they had participated in (or been invited to) an interview about management accounting systems.

Interviewee in the Financial Services Control of PCM said that

> *"I had applied to be supported for PhD degree in the field of management accounting within Libya butt this study program has not been approved as there is no available Libyan University provider for this course."*
>
> (Official in Tripoli PCM)

The key criticism that interviewees had of the relationship between Accounting Education and the Government Agencies is that there is little cooperation between theory and practice. Government agencies stressed that they want further research to be undertaken to address the challenges in practice but this research needs to be done by the universities so that accounting education can be improved by being more relevant to current practice needs and so there is greater cooperation between industry and education. The delay in the development of accounting education was blamed on the lack of development that occurred in Libya during the Embargo years.

6-4-7-2-2 Professional accounting institutions in Libya

All interviewees pointed out that the accounting professional institutions have important role to play in developing the accounting profession in Libya however there is no local institution and it is the developed countries institutions such as CIMA from the UK and CMA from the USA who are impacting on the development. In Libya there is no professional management accounting institute as yet, but there is the Syndicate of Certified Libyan Accountant that represents all branches and is the only professional accounting institute within Libya.

An interviewee in the Budget Department of General PC of Treasury said that:

> *"The relation and link between universities and Syndicate of Certified Libyan accountants is too weak indeed, therefore I stress on the importance of connecting them."*
>
> (Official in General PC of Treasury)

6-4-7-2-3 Business environment

The majority of interviewees stressed the importance of the current Libyan business environment (systematic surroundings) for all employees in general and accountants in particular. A key theme that was repeatedly expressed was that when there is a good economic and political environment there are improvements in accountancy workplaces and work. The political and socioeconomic situation within Libya according to the interviewees impacts on the accounting profession.

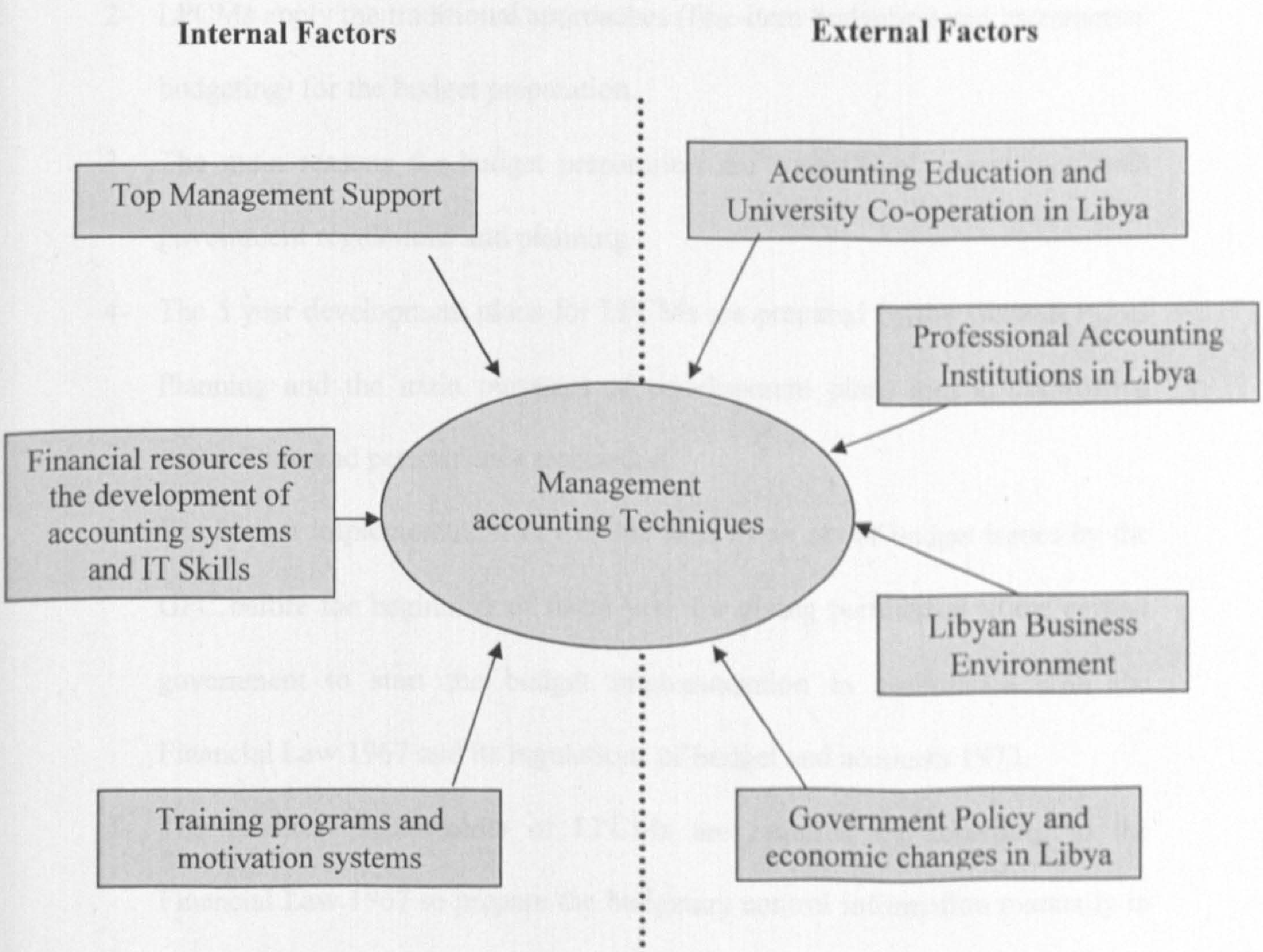
6-4-7-2-4 Government policy and economic changes in Libya

The majority of interviewees responded that government policy has a strong impact on the application of management accounting techniques. Interviewees stated that the government policy especially impacts upon the annual budget. There is further influence by the Libyan government report the interviewees through the imposition of regulations which have an impact on budget such as the instructions for preparation and implementation of the budget and the requirements for budgetary control reports.

An interviewee in the Budget Department of the General PC of Treasury said that since suspension of international sanctions in 1999 and full lifting of sanctions in 2003, Libyan economy entered a new development phase to face some economic changes and social problems. These social problems included housing, employment, and the provision of other public services. In addition the Libyan government changed the economic climate from the closed economy to the market economy. This has been done through the privatization of state companies, encouragement of local business entrepreneurs and foreign company investment. This official also confirmed that policy and economic changes have an impact on the budget preparation process which are currently been prepared using the old outdated government regulations and laws which have only had minor modifications. This interview strongly emphasised that the current regulations and laws regarding management accounting practices such as budget preparation, budgetary control and performance evaluation need to be reviewed and updated to meet the political and economic changes in Libya.

Figure 6-4 below describes the relationship between the various factors that impact on the application of Management accounting techniques within LPCMs and Central Government agencies within Libya.

Figure 6-4: Factors affecting applications of management accounting techniques



6-5 Summary

The interview process provided a broader picture and further details on the recent changes which have occurred within Libyan government. Central government officials clarified the procedures and processes which control the budget preparation and implementation, budgetary control information, development planning, final accounts, performance evaluation and factors which impact on the development of management accounting practices within Libya. From the interviews the main conclusions can be outlined as follows:

1- LPCMs prepare detailed proposals of the annual budget by the budget committees. Also the Cash basis is used for dealing with all expenditures and revenue.
2- LPCMs apply the traditional approaches (line-item budgeting and incremental budgeting) for the budget preparation.
3- The main reasons for budget preparation are controlling, compliance with government regulations and planning.
4- The 5 year development plans for LPCMs are prepared by the General PC of Planning and the main purposes of development plans aim at controlling expenditure and performance evaluation.
5- The budget implementation in LPCMs start by an act of budget issues by the GPC before the beginning of fiscal year for giving permission to the central government to start the budget implementation in accordance with the Financial Law 1967 and its regulations of budget and accounts 1973.
6- The financial departments of LPCMs are required by according to the Financial Law 1967 to prepare the budgetary control information manually in regular reports after approval by financial controllers.

7- The aim of budgetary control system is to prepare reports and ensuring the compliance with government laws rather than controlling and monitoring the performance. .Also the use of computers to prepare these reports is very limited.

8- Non-financial measures are not required by government regulations.

9- The performance indicators are not included in the planning and control documents.

10- The factors mentioned in this chapter Section 6-4-7 have a fundamental impact on the application of management accounting techniques of the LPCMs and central government bodies.

Chapter Seven

Chapter Seven

Discussion

7-1 Introduction

This chapter aims to provide a discussion of the key results and the conclusions for this study. Each of the findings will be tied to literature indentifying where there are current knowledge gaps and possible additional questions for future research. Where the case is different in the Libyan context suggestions will be made to explain and clarify what and why the literature has not been supported in the practice observed on a long with a discussion of the potential implications to theory and practice.

The study analyses the effectiveness of management accounting techniques and their current practices within LPCMS and the role of these techniques in providing information for planning, control, decision making and performance evaluation. In addition the study also investigates the factors which impact on the application of management accounting in LPCMs.

7-2 Review of the Research Sub-Objectives

From the main objectives of examining the current practices of management accounting techniques and the investigation of the factors which impact on management accounting within LPCMs the following sub-objectives were developed to assist in the analysis:

1) To examine the role of management accounting practices in LPCMs through:-

- Investigating the current practices of budget preparation in LPCMs.
- Analysing the extent of use of budgetary control information in LPCMs.
- Assessing the extent of use of performance measurement methods in LPCMs.
- Examining medium and long-term financial planning in LPCMs.

2) To evaluate the factors that might have an impact on the management accounting practices in LPCMs.

3) To determine strengths and weaknesses of the current practices of management accounting techniques in use in LPCMs.

As the Sub-objectives cover a broad topic area questions are developed to enable the researcher to focus on key areas of interest and to assess the effectiveness of the management accounting techniques utilized in practice. The questions which are utilized and used by the researcher in the study are listed as follows:

1. What is the role of management accounting techniques in use by LPCMs?
    a. What is the process of budget preparation in LPCMs?
    b. To what extent do the management accounting techniques in LPCMs provide budgetary control information?
    c. To what extent are performance measurements used in the LPCMs?
    d. To what extent do LPCMs prepare medium and long-term financial plans?
2. What factors affect the management accounting practices in LPCMs in the current Libyan business environment?
3. Are there any differences between the attitudes of financial managers, financial controllers and managers of services and projects in LPCMs towards the current practices of management accounting techniques used by their PCMs?
4. What are the strengths and weaknesses of the current practices of management accounting techniques in LPCMs?

Since there is this structure present in the research findings of this study the discussion will utilise the existing structure and address the findings according to the above research questions.

7-3 The role of management accounting techniques in LPCMs

The objective to understand the current role of management accounting techniques in LPCMs was undertaken through the use of four questions which broke up the topic in the distinct areas of budget preparation, the use of budgetary control information, performance management methods and medium and long term financial planning. Management accounting techniques were found to be present within LPCMs but there are areas where they could be improved. This discussion of the four questions will identify areas of concern and provides a rationale of the options which could be undertaken to address these concerns within Libya to provide new opportunities in the development of the public administration and the disbursal of government funding.

As a developing country Libya needs to utilise management accounting techniques that provide integrity, value for money and the rational use of limited resources. Iyoha and Oyerinde (2010) explain that within developing countries budgeting is a vital technique for ensuring integrity in public expenditure. The common aim of maintaining public resources means that the revenue and expenditure budget is one of the most important planning documents in all public sector organisations according to Al-Dhowaihy (2003), Sarraf (2005), Andrews and Shah (2005), Awio (2007), and Alkaleb (2009).

7-3-1 Budget Preparation

The Interview and questionnaire results revealed that within each PCM area there is a Budget Committee which has representatives from a number of LPCM department and a Financial Controller who is the Local General PC of Treasury representative in this development process. These findings are consistent with the previous research of

Ainsoo *et al.*, (2002) (quoted in Mullins, 2007) and Al-Dhowaihy (2003). However, through the research process it was identified that the Audit Department was excluded from the budget development process and the interviewees strongly supported the inclusion of these officials in the budget preparation process.

The absence of audit office as member in budget committee is as a result of the authorities and tasks of audit office which are determined by Libyan financial law (Libya State, 1967; General People's Congress, 2008). The audit office is responsible for the reviewing the financial transactions before spending and follow-up of revenue collection to ensure the compliance with directions and annual budget. This result means that internal control is absent in budget setting of LPCMs and the interviewees suggested that there needs to be greater internal control presence in the budget development process as the audit office will be able to advise and provide recommendations from their previous experience of implementing the previous budget requirements. As one Financial Services Control from the Tripoli PCM office stated that the audit office is needed in the budget committee in order to implement the main corrections of budget variances in their performance. This experience, information source and the ability to make recommendations about future proposals is currently being ignored in the development process. This exclusion of the audit office and the suggestion that they should participate in the budget development process possibly indicates a weakness in the current process as Tambulasi (2007) and Ramadhan (2009) both advise the use of previous budgets and their implementation to help in the development of the current budget proposal. Ma (2009b) stresses that the budget preparation process should provide and use relevant information. The Audit Offices can provide relevant information to the Budget committee from their experience in the implementation of the Budget (Al-Dhowaihy, 2003; Sarraf, 2005). However, there is strong participation of external control in budget preparation process and this comes from the Financial Controller as the regional representative of the General PC of Treasury with the LPCMs.

As the Libyan legislation and regulations covering the role of the Audit office current exclude their participation in the Budget preparation process and therefore the Budget Committee any recommendations that they may have from the implantation of the Budget by the Audit office is excluded as well. To enable the Audit Office to participate there will need to be an alteration of the current regulations and this includes Financial Law 1967.

From the investigation of the budget preparation committee it is possible to state that budget preparation is not centralised in Central Government or that there is limited interaction between the budget preparation committee and those who are responsible for the implementation of the final approved budget. The study respondents identified that those responsible for budget implementation are the audit office, the LPCM Financial Department and the Financial Controller. There is some centralisation within LPCMs according to the survey respondents but it is unclear what they mean was unclear as it was a mail questionnaire. When seeking clarification from the interviewees they advised there is centralisation in the management of PCMs through the General PC of Treasury by the Financial Controller. The Budget preparation for the PCMs is centralised in regards to the setting the total amounts available. The General PC of Treasury manages the State Budget and develops this budget in a centralised process but the LPCMs other than negotiating the resource allocation from State Budget do not have direct impact on the decision making process in the budget committees' decision making process over budget allocations. The research process confirmed the previous study findings of Al-Dhowihy (2003) in Saudi Arabian municipalities were other than the allocation from the Ministry of Finance the local municipalities developed their own budget allocations. There appears that there is some similarities in the control structures for municipalities within Libya and Saudi Arabia and thus future studies could look at the development strategies used in Saudi municipalities and assess the ability to be transferred to the Libyan context.

Al-Dhowaihy (2003) points out that the starting point for the preparation of the proposed budget for the next year is from the previous 3 years worth of budgets. The research participants confirmed that this practice still is the basis of budget development. When clarification about the use of the average was sought from the interviewees it was explained that with the lifting of the Embargo in 2003 there has been some instability in the market locally and global and this has impacted on the revenue and expenditure allowances. As a result the Budget committee are instructed by Central government to use an average of their last three years allocation amount add a percentage for inflation in their expenditure items. From this process it possible to say that LPCMs are following Central Government directions for the development of budget areas in the budget proposal. The officials in Central government that although there is some yo-yoing in the current local market prices they expect this settle with further development of the open market. Al-Dekhail (2010) argues that there are possible problems including the lack of information available to the private sector about municipal services to enable them to work in partnership arrangements to improve public services. If the continued market instability continues budget development will continue to need to use the 3 year average but this stability makes it difficult for officials to access the effectiveness of the Budget or to assess according to Jones and Pendlebury (2000) if the level of expenditure currently proposed to be incurred can be seen as reasonable.

While other Arab countries such as Bahrain has started the transition to accrual accounting practices (Ramadhan, 2009) it is evident from the research process that Libya is still highly dependent on the cash basis. While there have been some attempts by Libyan legislators to shift from the cash basis to the modified cash basis this has not been applied to all the LPCMs and therefore according to the Official in General PC of Treasury has not been successfully or effectively implemented. There was awareness amongst the Central Government interviewees to achieve complementary systems to those observed within developed countries there need to be changes to the current system in order to apply accrual basis. The change from cash to accrual is recommended by Ramadhan (2009) to improve accountability and improve cost control.

It appears that while other developing countries have started to make changes to enhance their accounting systems (Al-Dhowaihy, 2003; Ouda, 2003; Saleh and Pendlebury; 2010) by transitioning from cash to accrual there has been a delay for this undertaking in Libya. When looking at the internal systems, processes and the recent systematic changes to the political and economic structures within Libya it appears that Libya has been delayed in its development. The logical explanation for the delay was the UN Embargo (1992-2003) and the impact that this global political event had on local politics along with skills and knowledge development within Libya

(Alfaitori, 2007). The literature (Mogherbi, 2003a; Saleh, 2004; Shareia, 2004; Salama and Falanagan, 2005; Alfaitori, 2007) describes how since 2003 Libya has moved from a state to market economy and started to implement changes to reflect this move in the economic systems and regulations covering private enterprise. There have been some changes to public enterprise but the current key piece of legislation that impacts on the development of budgets for LPCMs according to the study participants is the 1967 financial regulations.

It has been suggested by Saleh and Pendlebury (2010) that cash based government accounting should be transferred to accrual-based systems to enable developing countries like Libya to take the first step in applying modern management accounting processes. The reasoning behind this is a shift from cash to accrual means that it reduces the opportunities for malfeasance and improves that accountability of those in the central and local government agencies. Mahdavi and Funnell (2003) highlight that to improve accountability within local government advanced management accounting practices such as the accrual base should be implemented. Saleh (2007) indicates that further studies are needed for developing countries to explore the issues that they face when undertaking the transitional change from cash to accrual basis. One of the key features which Oliorilanto (2008) suggests in developing countries that enhances the transition from cash to accrual accounting is when the change is enabled and has strong political support for central government and local government enabling change to accrual accounting and the support politically that government agencies should be more accountable to the public about the provision of services and disbursement of revenue on expenditure (Iyoha and Oyerinde , 2010).

Management accounting practices in the LPCMs are still using the traditional method such as Line-Item Budgeting and incremental budgeting and the research process has confirmed that the rational budgeting approaches such as ZBB and PPBS are not applied in LPCMs at this time. These findings broadly reflects the literature of Almohaimeed, (2000), Al-Dhowaihy (2003), Ouda (2003), and Awio (2007) who all observed that the developing countries governments are still using the traditional budgeting approaches. The purpose for using traditional budgeting approaches according to the interviews is the compliance with government regulations, control and planning and that the Libyan Government uses the annual budget as the primary method to control public funds. This focus on the Budget to control public spending was identified by the interviewees as a limitation in the traditional approaches as it created inflexibility as it encourages LPCMs to overspend or expend all their resources rather than saving any reserves. Wong (2007) argues that use of modern approaches such as ZBB for public budgets improve the efficiency and effectiveness of local government performance because of the current use of cash bases the modern approaches for budget development cannot be implemented in LPCMs. In a similar Arab environment in Bahrain (Ramahdan, 2009) and UAE (Alkaleb, 2009) there has been a push to move to modern budgeting approaches in order to improve the decision-making process for developing the budget and to create better information on the adequacy of government services to meet the needs of society. The rationale behind the implementation of modern approaches is to enable improvements in management accounting effectiveness and efficiency as one of the information systems in local governments. If the purpose of the Budget in Libya is the control and management of funds consideration needs to be undertaken to ensure that the funds are providing the services that its citizens require and that the local government performance is effective and efficient. Mahdavi and Funnell (2003) stress that public spending should be meeting the public needs such as infrastructure projects and developing the standard of living. The officials in the interviews stated that LPCMs are faced by the current system to spend the whole of the allocated amounts in the annual budget as if they spend less they face reductions in the next budget year. This compels them to use the annual budget impacts on the preparation of the next year's budget as it alters the figures through the use of incremental budgeting to create a view that it was necessary to spend the total amount to meet the needs of the citizens without assessing the effectiveness and if the funds were efficiently utilised (Ouda, 2003). The traditional approaches for budget preparation are focused on the inputs only, according to Alkaleb (2009) who emphasises that these approaches do not provide decision makers with the necessary information that enables them to determine spending priorities and thus does not make optimum use of public funding. To address this perceived issue with traditional techniques Ramadhan (2009) advises that the gradual implementation of performance and program budgeting beside line-item budgets is been undertaken to improve the overall efficiency, effectiveness, transparency, performance, and accountability. According to Ma (2009b) in China the use of modern budgeting techniques has improved budget rationality and therefore budget efficiency while reducing fiscal fraud. Through the implementation of modern management accounting approaches according to Saleh and Pendlebury (2010) developing countries local government agencies are provided with tools which enable them to meet the challenges of globalisation and development of the local economy and infrastructure.

The survey and interviewees confirmed that the main rationale underpinning budget preparation is the requirements to comply with government regulations, the control of resources and planning. Management accounting system in LPCMs were designed for planning, controlling, performance evaluation and decision making but it is used to increase central government control by compliance with government regulations over LPCMs activities for protecting the public funds. Therefore, the main motives for budget preparation in LPCMs are budgetary control and monitoring of resources, compliance with government regulations, and planning for the future, whereas according to performance evaluation and guidance for decision making are less important than these motives. In this context, this result is consistent with the findings of Al-Dhowaihy (2003) who concluded that the main motives for budget preparation by municipalities in Saudi Arabia were compliance with governmental regulations and a planning for future. Ramadhan (2009) states that legal compliance is required to ensure that resources are distributed fairly but identified that with a strong focus on legal compliance there can be a lack of information provided to support the other functions of local government such as decision making and the development of long term goals. Claassens and Van Zyl (2005) indicate that there are various other laws and regulations in 9 Sub-Saharan nations that prescribe clear authority, procedures and time-frames for each phase of the budget cycle. The clear authority over the Libyan budget preparation process was identified in the study with flow charts of the approval process (See Figure 6-1 chapter 6). The interaction with Central Government between the Budget Preparation committees and the LPCMs is supported by a formal legal structure from the BPC and the GPC. As Iyoha and Oyerinde (2010) argues that in the Nigerian context that annual budgets must be approved by central government as one of the important legal bases in local government. The control and legal support occurs in the Libyan context to give LPCMs the authority to provide services and collect revenue for the state. The high emphasis that all the interview participants placed on the compliance with government regulation, policy and guidance indicates there is strong central government control in the regional administration. Awio (2007) suggests in Uganda that was non-compliance with government regulations in local governments regarding budgeting practices this non-compliance was associated with corruption. While LPCMs do not appear to issues with corruption in the budget preparation process there are still concerns that there are opportunities for corruption thanks to the political system and the use of the traditional management accounting approaches. While all the interviewees state that the purpose of the Budget Preparation process was to meet the requirements of the Libyan Financial Law (1967) which aims to protect public funds from a negligence and waste as well as to determine the extent of compliance with government regulations and for preparing the future plans (Al-Hasade, 2007; Al-Badre, 2007). The current legislation requires the use of the traditional accounting management approaches and if LPCMs wanted to implement modern management accounting approaches they would need to lobby central government and the various parliamentary bodies to have a legislative change. It appears from the interview process that members of the central government bodies such as the Financial Control and Performance Evaluation Department of General PC of Inspection and Control have identified that while there have been some modifications to Financial Law (1967) these modifications have not been effective as they were only minor and a major legislative review would need to be undertaken to address this statute to bring the legislation into the 21st Century. To make the legislative changes there would need to be a top level central government agent who is willing to lobby the various government departments and the parliamentary houses to activate a change. The current over focus on compliance needs to be addressed to improve LPCMs service delivery, budgetary control and future planning. The current use of the traditional management accounting approach provides a number of opportunities for deviance and misuse of resources. The current level of deviance occurring is unknown in part through the lack of information provided by the current management accounting approach in place which is based on Financial Law (1967) Through an alternation of the legislative requirements modern management accounting could be introduced and thus a reduction of the opportunities for deviance provided while providing greater information sources to help in the management, decision making, resource allocation, LPCM performance and accountability.

From the interview process a strong understanding of the formal processes relating to the implementation of the annual budget was developed (see Figure 6-2 chapter 6). The internal control structures within the LPCMs and the interaction of Financial Controllers for the management of revenue was also described and a schematic of the process (see Figure 6-2 chapter 6) explains the complex external control process which is undertaken to ensure that spending of resources follow the approved budgets. All members mentioned in the questionnaire and interview are responsible for implementing the budget, but there are variances in the extent of responsibility of individual managers /or departments for implementing the budget in LPCMs. Explicitly all respondents reported that the audit office, financial department, and financial controller have complete responsibility for spending. The planning department, services and projects department and administration had less responsibility for spending within the budget allocation by the government regulations. As mentioned earlier there are issues related to the implementation and the budget development this being that there is a lack of ability for the Audit Office to inform the committee about processes and lessons which can be learned from previous implementations of budgets. The Legislative focus on the protection of funds but does not seem to have a process in place to assess the efficiency and effectiveness of services provided by these funds. While the services and project department have little or limited responsibility with the government regulations over the spending they currently appears that as a result there is limited accountability for their spending actions or even if they provide services which meet the needs of the citizens. Mollah (2008) argues that an important part of governance is accountability. With greater accountability within all areas of LPCMs through the introduction of modern management accounting approaches, new legislation and a change in government agency ethos the effectiveness and efficiency of the LPCMs can be improved internally and externally. If government workers have high level of ethos in relation to government agency spending waste can be reduced. Iyoha and Oyerinde, (2010) identified in Nigeria that without accountability for public expenditure there are opportunities for resource squandering and defrauding of public funds.

Hou and Ma (2006) indicate that in China when modern management accounting approaches were implemented there was greater control of resources. This control of resources is the primary aim of Libyan legislation but the current legislation does not assess the effectiveness of the spending purchase. Also the current budget practice according to the interviewees encourages the LPCMs to spend the whole of the budget allocation in each financial year or they may face a reduction in allocation. This spending per line item is not ensuring that the spending is efficient and not saving resources so that additional development can be undertaken from the saving reserves. If there is an alteration to line item allocations by transferring of amounts between items the General PC of Treasury checks the original allocation and how much funds are still available while additional approval must be given by General PC for the transfer to occur. The focus on the control over the implementation is evidence from this transfer procedure and from the standard purchasing procedure as identified in Figure 6-2 chapter 6.

7-3-2 Development Plans

From the research participants clarification was provided in relation to the use of Development plans and how these plans are utilised in medium and long-term financial planning of the LPCMs. The survey respondents (72.9%) indicated that the 5 year Development Plan is the starting point of budget preparation but the responsibility for the preparation for the Development Plan for each of the LPCMs is with the General PC of Planning. While the General PC of Planning is responsible for the process this approach seems to be a centralised management role as the LPCMs are required to prepare the Development Plan per the General PC of Planning requirements and policy directions and when prepared they are required to lodge their plan to the General Pc of Planning for approval. The interview respondents confirmed that the LPCMs comply with the directions and regulations of the General PC of Treasury and General PC of Planning according to the interview respondents. The approach described by the interviewees can be described as a form of central government strategic planning. Elbanna (2010) identifies in the UAE government in 2007 aims to move their current planning approach to a centralised strategic planning approach. The use of the General PC of Planning to coordinate the Development plan is evidence of a similar centralised strategic planning approach to what has been observed in the UAE.

The survey respondents indicate that medium term plans (1 to 3 years plan) are not as frequently used. The interviewees clarified why this type of planning was not as frequently used as this type of plan is not compulsory by the government regulations. Interview respondents point out that some LPCMs often prepare the medium plans by services and projects departments. This might be a result of services and projects managers who are taking the timelines of government contracts which are made with the private organisations for construction and maintenance operations within the LPCM region. When comparing the Libyan approach to that found in the Saudi Arabian municipalities it appears that this is one area where they are different in their approach. Al-Dhowaihy (2003) highlights in the Saudi Arabian context the municipalities predominately utilised medium term plans and the longer 5 year plans were not used at all. As part of the review of the current Saudi Arabian municipality practices Al-Dhowaihy (2003) identifies that the longer term plan should be implemented as part of the implementation of modern management accounting techniques so that clear objectives are identified in the development plans. Al-Dhowaihy (2003) and Alkaleb (2009) both identify that through the development of the accounting system developing countries would have the ability to keep pace with global developments and improve their performance in international markets.

Interviews results showed that the key purposes for preparing development plans are the measurement of achievement rate in PCMs projects, by comparing actual rate with desired rate and controlling expenditure. This type of performance evaluation was criticised by Ouda (2003) as it is not providing performance evaluation into the effectiveness of the development plan. While the development plan has actual details about performance indicators the assessment of the indicators could be enhanced through the development of the current account practices and the implementation of modern management accounting approaches. As Libya keeps on its current National development plan according to Ham (2007) aims to improve technology, skills while attracting international development. According to Alzne (2006) top management executives within the Libyan public sector are required consider the planning preparation techniques to deliver efficiency and effectiveness to public services and accommodate with the new economic conditions. Yet when speaking to the officials involved in the preparation of development plans this does not appear to happen. Some of the officials identified the legislative regulations as part of the rationale why this not occurring but indicated where possible they make considered judgements of the world economic situations and try to adapt in their development plans to a less than positive approach particularly in the area of available oil revenue. By using a lower than expected or current value approach when preparing the development plan it is hoped to cater for economic down turns and a reduced amount of national income. This supports the guidance advice provided by the General PC of Planning (2008) who recommended the diversification of local income sources and the reduction of dependence on oil resources for income.

7-3-3 Budgetary control information

From the survey response it appears that majority of budgetary control reports are quarterly (99.2%) and on demand (83.1%). This response rate confirms the process described by Al-Dhowaihy (2003) who explained that budgetary control information usually provided to central government in monthly and quarterly reports to monitor actual achievements against plans and budget figures. Confirmation was provided in the interviews with officials in the General PC, General PC of Treasury and General PC of Inspection and Control who stated that the reports are providing by PCMs quarterly and sometimes on demand. More detailed reports were repeated by the General PC who received reports of budgetary control quarterly and sometimes on demand, while the General PC of Treasury received reports of budgetary control quarterly and sometimes on demand, whereas that General PC of inspection and control received reports of budgetary control on demand.

Regarding, the budgetary control information, the overall aim of budgetary control system is to prepare reports for ensuring the compliance with government laws rather than controlling and monitoring the performance of PCMs. Therefore, budgetary control system is concerned only with legal accountability. All financial departments are responsible for preparing and providing reports to financial controllers to government bodies but financial controllers in all LPCMs are required by government regulations to provide regular reports quarterly and sometimes annually or on demand. An attempt to define the extent of providing budgetary control information to central government controlling bodies, LPCMs always provide budgetary control information such as (salaries and awards, operations expenditure, services expenditure and income).This information is prepared by Financial departments in LPCMs manually. General PC receives these reports quarterly and on demand or sometimes annually, General PC of Treasury receives reports quarterly and sometimes on demand and General PC of Inspection and Control receives these reports annually or sometimes on demand. This information is accurate but sometimes is not at the appropriate time according to the interviewees. It appears that some Financial Controllers use a bargaining system with the LPCM they are working with to get the budgetary control reports they need from the LPCM to provide to the Central Government. One reason why the quarterly approach is used funding for Salaries and Rewards, and Operational Expenditure and Services Expenditure according to the interviewees is to provide an incentive to receive the budgetary control reports. It appears that leverage over the release of the funding is used to push the required reporting process. Some interviewees also stated that the reports are sometimes sent and received via phone or fax from PCMs to the Budget Department in General PC of Treasury and Financial Control and Performance Evaluation Department of General PC of Inspection and Control. The use of telephone reporting and the lack of formal documentation to support the verbal report could lead to errors. Telephone reporting may have been utilised due to infrastructure difficulties but there is a legal requirement for a specific form to be utilised when making these reports. The legislation advises that the forms need to be prepared by the LPCM Financial Department and then approved by the Financial Controller. The Financial Controller is responsible to confirm the details and must sign and stamp this form. The side stepping of the process means that a control aspect of the process can be lost by Financial Departments directly informing the General PC of Treasury and the General PC of Inspection and Control. As the Financial Departments in the LPCMs are still required to use the traditional hand written ledger the ability to easily generate a report which can be submitted to the Financial Controller is not available.

The main source of budgetary control information is monthly reporting form from financial departments to the Financial Controller then these reports will be sent quarterly or on demand. Aragon and Casas (2009) point out that in Peru budgetary reporting is undertaken to ensure compliancy to the budget and official regulations. There are similarities in the Libyan context when the General PC of Treasury and the General PC of Inspection and Control receives regular actual revenue and expenditure reports from PCMs for the purpose of comparison. They use the comparison to determine variance between the actual revenue and expenditure and proposed budget, then surplus or deficit in the budget will be determined. In this context, Ouda (2003) and Al-Dhowaihy (2003) found that the budgetary control is a function concerned with comparing and ensuring that the actual expenditures are in line with amounts in the budget. Like Uganda in Awio (2007) budget control is utilised in Libya to ensure that actual expenditures do not exceed budget proposals. However, unlike the Bahrain municipalities in Ramahdan (2009) the budget control process does not provide an opportunity for an assessment for "value for money" to be undertaken.

The study participants reported that the use of computers to prepare the budgetary control reports is very limited. When speaking to the interviewees the reason why was clarified that this is primarily a result of the legislation requirements and the delay in development within Libya who reported that the LPCMs do not have enough qualified staff to work with IT. The interviews officials of the General PC, General PC of Treasury and Financial Services Controls of LPCMs, who stated that the computers were not used to prepare budgetary control reports but were used to print out correspondence. This use of the computer as basically a glorified typewriter is reflective with the computer usage level of the country which is currently similar to what was experience in the UK during the late 1970s early 1980s. Computers are not on every government employees' desk and the ubiquitous presence of technology in developed countries is not found in Libya. This is due to the years of isolation and the political history of Libya with it is neighbours and the rest of the world. While there has been development in Libya since the lifting of the embargo the lack of automation of financial systems through the use of computerisation is likely to impact on Libya's ability to introduce modern management accounting practices. The current legislation needs to be reviewed to enable the use of electronic systems but also a review of the implications of IT systems needs to be considered. The use of IT in Bahrain according to Ramahdan (2009) has helped with the transfer from traditional to modern accounting practices. While computers can provide technological support and advances there are some issues which need to be considered such as information security and data protection. With better information links between Central government and LPCMs through the use of a computing network the difficulties in lodging the reports with the correct approval process in place could be overcome with technology but Libya needs infrastructure improvements to have the same type of computing networks as seen in the developed countries.

Also from the budget control reporting process the interviews identified that one of the main reasons of variances between actual revenue and expenditures and proposed revenue and expenditures are discovered by comparison. The rationale why there are these discrepancies according to interviewees is due to an absence of motivations systems in LPCMs to encourage their staff and increase their productivity, as well as the shortage of competent employees for collection revenue in PCMs. This lack of skilled staff available ties into the lack of staff skilled in the use of IT. The attitude towards the collection of revenue is part of the current government employee ethos that needs to be changed. Change to this ethos can only occur when accountability for actions are spread from specific named individuals through to the whole agency staff. The delays in the collection of revenue impact on the local LPCMs cannot be easily assessed or recognised due to the current management accounting practices. With the implementation of modern management accounting approaches the potential issues of liquidity could be identified earlier and then LPCM Financial Departments would have addition motivation for revenue collection as it is directly impacting on their current operating budget. Recently revenue collection was an area which Al-Dekhail (2010) identified that the Saudi Arabian municipalities could improve in. As Libya is a couple of decades behind in the development of modern management accounting approaches there is an opportunity to learn from this regional Arab country and implement systems earlier to address this issue.

7-3-4 Performance measurement

From the survey response about the use of performance management it is apparent that only 3.4% of the LPCMs utilize non financial output measures in their annual budget. This lack of non financial information was confirmed by the interviewees who advised that since it was not required in the regulations it was not produced in the various reports. These findings are similar to the experience of Al-Dhowaihy, (2003) in Saudi Arabian municipalities and lead to concerns about how and if the LPCMs are meeting the performance needs of the community they are responsible for. Tooley *et al.*, (2010) state that performance reporting by Malaysian local authorities included financial and non-financial information to meet the information demands of accountability. For the LPCM to be accountable for the services that they are providing the non-financial output measures need to be required. Claassens and Van Zyl, (2005) suggest that to improve the level of civil society in

Sub-Saharan countries there need to be greater transparency about the operations and performance of local municipalities and the citizenships should have access to the results and demand improvements in performance. While there is some reporting of non-financial information for statistical purposes according to officials in the Financial Control and Performance Evaluation Department of the General PC of Inspection and Control, who stated that the non-financial output measures were not included in the annual public budget. On the other hand officials in the Financial Services Controls of LPCMs confirmed that there are no compulsory regulations regarding attached non-financial output measures with annual budget, in spite of this information being useful for evaluating LPCMs' performance. LPCMs use reports for measuring the fulfilment proportion of their projects, for example the table of quantities which are attached with contracts, length of constructed roads, number of houses built and schools and others. But this statistical reporting is not assessing the effectiveness or the efficiency of the LPCMs in the performance of the duties and if their services are meeting the needs of the citizens. The citizens of the LPCMs are not able to access the current performance measures for their local municipality and this undermines transparency in governance and public accountability. Tooley *et al.*, (2010) support the idea of providing performance information to the citizens to help in the prioritization of public spending and setting the objectives of the local government annual budget.

In South American countries according to Curristine and Bas (2007) there have been public sector reforms that have included the use of non-financial information to improve performance. This includes the setting of performance indicators and reporting on how and if these indicators have been met. From the study it is apparent that performance indicators are not used within the LPCM management and control while the budget variance analysis and the meeting of budget targets were uses as the performance measurement techniques of LPCMs. In this respect Shah and Shen, (2007) indicate that performance indicators can be included in budget instructions during budget preparation to demonstrate desirable performance levels. Schacter (2000) recognises there are encouraging incentives schemes in developing countries which are tied to performance measures. The performance indicators are important to facilitate the performance evaluation of all government bodies and PCMs. A small number of PCMs have performance indicators that are set up to measure desired work and payments, after preparing development plans. Unfortunately these indicators were not included in planning and control documents in the majority of LPCMs. Therefore, LPCMs considered that the extent of compliance with budget implementation and government regulations is the most important indicator for LPCMs performance.

Siddiquee (2010) argues that is necessary to make the reports on the indicators not just to collect the information as this public accountability will help in the assessment of performance. Mimba *et al.*, (2007) point out that performance indicators can help in the assessment of value for money and recognition of where performance can be improved but these indicators need to be realistic and achievable. There were some concerns from Mimba *et al.*, (2007) about developing countries where local government performance is undermined by corruption and the repeated failure of local authorities to provide statutory services. If Libya introduced performance incentives that assess the value for money and service provision this could improve the levels of accountability within government agencies and also improve the transparency of the decision making process with the citizens.

Ramadhan (2009) points out that local government authorities need to respond to the need of the local population and ensure that services provide are value for money. When assessing the value for money, in local government, an assessment is made about the fitness for purpose and if the product or service is efficient and effective use of public resources. If LPCMs are required to report on their performance and indicate through the use of non-financial information their ability in meeting of performance indicators this could reduce the issues were public projects overspend and do provide the public with a satisfactory outcome. Mimba *et al.*, (2007) argue that when an organisation can demonstrate that they have strong performance it can be inferred that they are providing effective and efficient services.

While the study respondents indicated that there were some performance measurement techniques used within LPCMs and the central government these techniques were based on financial information. The interviewees indicated that comparisons are made to determining variance in budget implementation and there is some comparison between the various LPCMs which meet the financial indicators. Ouda (2003) indicates that the accounts explain the amounts of receipts and expenditures compared with the budgeted figures and therefore the measure of performance is only the comparison of budget proposal with actual income and expenditure. The comparison between the various LPCMs are only assessing the organisations ability to meet the government financial requirements and not revealing if the organisational performance is efficient and effective. Mimba *et al.*, (2007) state that the performance in developing countries of public service must rediscover the balance between the demands and provision of performance information to determine an unsatisfied demand position which needs to be addressed.

When discussing performance management one of the Financial Controllers identified that auditors needed to be established as part of the budget development committees as way of addressing budget variance. This financial performance indicator impacts on the utilisation of funds and the Financial Controller was suggesting that in his area the inclusion of the audit office in the budget development committee would help in reducing the number of budget variances that occurs in his local area and thus improve the budget allocations and decision making process when the budget is developed by the committee. This alteration could also have the potential to improve the LPCMs current performance assessment by Central Government as the total number of variances is used as a performance indicator.

When discussing performance with the Central government interviewees they reported that they faced constraints due to the inability to access information about performance and lack of authority to implement corrective decisions including requesting non-financial information to assess the effectiveness and efficiency of LPCMs. The interviewees from the General PC of Inspection and Control emphasised that although recommendations have been made about improving performance measures, accountability and ensuring appropriate public fund use that had not been acted upon. The reasons why the BPC and GPC have not responded to reform requests could be due to a number of reasons but there is no confirmed reason available. Both of these parliamentary agencies have the power to change but appear at this stage unwilling to make change as Libya still has forty year old legislation controlling financial reporting. Further investigation in to why reforms have not been undertaken could be a further research study for those who are looking to improve governance in Libya. The world has changed in the last forty years and this includes the development of global markets and multinationals (Waweru, 2004). To meet the challenges of a technologically advanced market structure and to compete and attract investment Libya has to have the skills and this includes using performance evaluation to participate in this dynamic market structure. The isolation as a result of the Embargo and before the embargo due to political conflicts (Saleh, 2004) has impacted on the technological development and thus also impacted on the implementation of new skills and knowledge. Since the current legislation ties LPCMs to using traditional accounting approaches without legislative review modern management accounting approaches which include performance evaluation cannot be implemented. Without reforms to the current system accountability is not developed and the assessment of effective and efficient performance is stifled. This inability to influence change or develop current practice by central government agencies will continue to create problems when they are required to assess the performance of LPCMs.

With the privatisation of some local government roles there needs to be an approach in place which enables LPCMs and Central government assess the performance of these private providers. Alruwais (2007) highlights that through the use of modern performance measurement systems the Saudi Telecommunication public provider was able to improve performance and become competitive in the local market. One particular technique that Alruwais (2007) argues that be able to help the performance measurement system is the balanced scorecard. If Libya is to improve its infrastructure through the use of privatisation there needs to be assurance for the LPCMs and Central Government that companies are performing and providing the necessary development. Mimba *et al.*, (2007) found that stakeholder involvement in developing countries is lower than in developed countries. As Libya develops in line with the GPC plans to develop its economy and technology as described by Ham (2007) the level of stakeholder involvement is likely to increase if Libya follows the trends in developed countries and it is necessary to ensure that the infrastructure organisations that provide key services are performing efficiently and effectively. Almohaimeed, (2000) and Al-Dhowaihy, (2003) both suggest that traditional approach could be improved by the implementation of modern management accounting practices as the traditional approach only focuses on the inputs. Modern management accounting practices focus on the inputs and the outputs of an organisation and could provide greater control to the Central government in the management and assessment of LPCMs including the assessment of private companies which undertake LPCM service provision through the use of modern performance measurement systems such as a balanced scorecard.

The study participants identify that the LPCMs are not directly responsible for undertaking performance management other than the reporting requirements to enable the Financial Control and Performance Evaluation Department of General PC of Inspection and Control and the Budget Department of General PC of Treasury are responsible for performance evaluation of LPCMs. This evaluation is also undermined according to the interviewees by the shortage of resources (personnel and fiscal) to perform evaluation on the bodies. When reviewing the other responses about performance evaluation from the interviewees it is apparent that current system is not meeting the needs of those who are responsible for the performance evaluation and the evaluation which occurs is only focusing on the inputs as the performance evaluation is constrained by a lack of non-financial information, standardisation of performance requirements and the absence of service provision assessment. Since the current legislation does not require the LPCMs to undertake performance evaluation other than the required financial reports and some limited statistical reporting the LPCMs can be said to not be undertaking performance management. Tooley *et al.*, (2010) identify that a range of information sources is required to ensure that an organisation is working efficiently and effectively. While there is no transparency or limited accountability with the citizen about the service provided by their local LPCM the effectiveness of the organisation can be questioned. If LPCMs according to the legislation supposed to be providing services and infrastructure to a regional area according to Alwerfale (2006) and they are not reporting on their service provision how can the citizen be satisfied that they are receiving the services and this leads to the question of how can Central Government can be assured that public funds are being protected. The current Financial Law (1967) aims to protect public funds but it does not provide the tools required to ensure that these funds are being used efficiently and effectively, therefore the LPCMs themselves cannot be certain they are meeting their legislative requirements to provide infrastructure and services for the public of their regional responsibility.

7-4 Factors which impact on management accounting in Libya

From Figure 6-4 in Chapter 6 it is possible to observe that there are a number of factors impacting on the application of management accounting techniques within Libya. The respondents to both sections of the research study indicated a broad range of internal and external factors which appeared to be linked in some of the causes that have created these factors such as the age of the current legislative regulations such as Financial Law 1967 (Libyan State, 1967).

7-4-1 Internal Factors

In the survey Top management support was considered to be 'above average importance' or 'extreme importance' by 86.5 % of the respondents and this was confirmed in the interviews who identified that without top management support the current management accounting systems cannot be developed to face the current challenges that is encountered with LPCMs and other government agencies. Officials in the interviews identified that there are issues in relation to the current accounting system and made a recommendation that within LPCMs that the top management personnel have understanding and knowledge of accounting practices including an awareness of planning, control and performance evaluation. When discussing the top management in the central government it was identified that the current accounting system issues while identified as needing reform is not a priority for the Government and the parliamentary houses. The political environment according to Watson *et al.*, (2007), Abulgasem and Alukel, (2007), Aggestam (2009) impacts on the development of government regulations, management accounting practices and the implementation of modern practices to address challenges such the current government priority of reducing the dependence on oil revenue and developing local businesses. Al-Badre (2007) points out that political environment through the legalisation has impacted on the development of Libyan accounting practice. Officials from the Budget Department in General PC of Treasury and Financial Services Controls of PCMs further explained the difficulties that the found with the current system by stating that the top management of their specific agencies needed to give greater attention issues that they repeatedly face and address issues by lobbying the parliamentary bodies to make the necessary changes. From the literature review it is apparent that while some minor modification amendments have been made the main legislation covering accounting practice is the *Libyan Financial Law (1967)* and this law it has been suggested in the various interviews needed to be revised to adapt to the new challenges of globalisation and the technological developments of the last forty years (Mahmud and Russell, 2003). The difficulties and the recent attempts to reform the current systems in use according to Oliorilanto (2008) required greater synergy between all the stakeholders and strong support from the top management within the various agencies in conjunction with parliamentary will to make these necessary changes.

LPCMs without strong management or top management who have the necessary understanding of modern accounting systems are likely to struggle with the changing environment. Management accounting provides one of the information systems of the organisations and the decision making process will be hindered by a deficiency in understanding about the reality that each municipality has to address. It has been suggested in some of the interviews there are some LPCMs that do not have accounting knowledge and these municipalities are hindered by this lack of knowledge, competency of skill and understanding of the complex context that they are working in. While, Mimba *et al.*, (2007) stress that the performance expectations for local government agencies in developing countries are lower this is likely to change through Libya's exposure to developed concepts and cultures. As more demands are placed on the local authorities to provide the services and infrastructure they are legal responsible for; the citizenship are going to demand improved performance as their expectations rise (Saleh and Pendlebury, 2010). LPCMs without the systems in place to collect the required information will not be able to address the demands to improve their performance as they will not have a bench mark to identify where improvements can be made.

Another factor identified that impact on the internal organisation and operations was the financial resources for accounting development and the need for computing skills. The provision of adequate financial resources for accounting developments were rated as above average or extreme importance by the majority (83.9 %) of the survey respondents. This high response was matched in the interviews when the respondents' emphasized that this factor combined with computer skills greatly impacted on the development in the application of modern management accounting techniques. The lack of computer availability in some cases coupled with not having staff with the necessary skills was an internal issue which Waweru *et al.*, (2004) suggest could obstruct management change. As one Budget Department of General PC of Treasury official identified while there is a budget available for implementing new technology and facilities it is wasted resources if you do not have the personnel available to operate this machinery. The survey respondents (73.8%) strongly supported that the use of computer systems affect the implementation of management accounting. It should be noted that while there are computerised systems in agencies the use of computer systems are constrained by the legislation which requires the manual traditional reporting forms. Mahmud and Russell (2003) argue that the use of technology is underdeveloped within Libya and this is impacting on the development of the country's infrastructure and information systems. This inefficiency of utilization of the technology impacts on the preparation and timeliness of the submission of the completed forms. Interviewees complained about the submission of official reports and how they are delayed identifying the manual techniques as a key reason why these reports were delayed. This impacted on the Central government agencies in the completion of their activities including decision making, performance evaluation and allocation of funds. While there has been strong support for the development of IT in Libya (The General PC of Planning, 2008) the challenges of recent development through international agencies participating in the local economy is going to increase (Ham, 2007). The investment in technology has occurred but the utilisation is not efficient or effective and this in the long term has issues for the various stake holders. Current personnel with LPCMs are affected by not having the skills to complete their roles efficiently and effectively and these impacts on the agencies performance and provision of services. With the increasing pressure to reduce the reliance on the oil revenue LPCMs are going starting to struggle to meet their development plan requirements. To address the skill shortage staff should receive additional training to enable them to have the skills and knowledge to perform their roles effectively along with legislative reforms that makes the contradictory and archaic legislation adaptable to the current challenges and technological usage. The current staff recruitment practices within LPCMs need further review as one interviewee identified that there is some social or cultural practices in use which have resulted in staff not capable of meeting the challenges. Further research into the recruitment process and the organisational culture with Libya is needed to enable this issue to be fully understood. While it could be suggested that the strong ties of clan and family are utilised to gain employment only further research would confirm that this practice is occurring across the various agencies. If clan links are being utilised in the employment of staff this leads to concerns about the availability of top management personnel who the necessary professional education, knowledge, skills and experience to lead in the development of Libya and in particular the development of LPCM management accounting practices.

The third factor of training programmes and motivations systems in the survey response received 92.4 % and 80.5 % respectively. Additional clarification from the interviewees repeatedly emphasised that there are training programs in all levels of government agencies to address skill shortages but unfortunately there had been some neglect for the administrative and accounting sector. Interviewees identified a number issues with the current training programs which can be summarised as the curriculum that does not meet the challenges encountered in practice or workplace settings, and the use of traditional management accounting curriculum due to the legislation (Mahmud and Russell, 2003; Al-Badre, 2007; Ham, 2007). The issues with the curriculum results in a lack of awareness about modern management accounting approaches and capabilities and thus the newly qualified professional is faced with unfamiliar challenges when they enter the workplace. Schacter (2000) identified that to enable transformation of accounting systems there needs to be the necessary training and motivation for this change to occur. The motivation or incentive systems are not tied to performance outcomes and this was liked why internal training courses are not addressing the skill shortage needs or enabling workers to implement new skills in their workplaces. The incentive scheme which encourages workers to improve the performance according to one Financial Service Controller actually undermines the performance of the agency as the basic support of goods was increased. This support of basic goods coupled with a low cost of living means that workers are not incentivised to work harder as the minimum state support satisfies all their needs and thus the incentives are not utilised as the seen as unnecessary. If the workers are not working to their peak efficiency and effectiveness they are less likely to participate in additional career development activities such as knowledge development through participation in professional or postgraduate courses. If staff members are unaware of the modern approaches when and if the government enables the implementation of these approaches they will not able to deal with the implications of the change. While the government may make policy and legislative changes if the staff on the ground are not able to implement these changes these benefits of the changes will not occur. Change can fail to meet its objectives when it is unsupported and therefore the top management of central government, LPCMs and the parliament the GPC need to address the training and incentive system that supports any future socio-economic changes including the introduction of modern accounting approaches to enable Libya to compete equally in the global economy. Saleh (2004) identifies that there needs to carry out further research into the training needs of the current accounting professionals and through the development of new programs to meet the systematic challenges the accounting professional can develop their professionalism.

7-4-2 External Factors

Accounting Education in Libya and Co-operation between universities and LPCMs was linked in the interviews as a related topic area. Interviewees clarified the survey respondents (82.0 %) reaction that accounting education in Libya is above average or extremely important. All the interviewees identified that accounting education is important for the implementation of modern management accounting techniques within Libya and that due to current education curriculum there is a discrepancy between the theory and the workplace. Saleh (2004) argues that accounting professionals can benefits from work experience and postgraduate education in developed countries as this will enable them to bring modern management accounting experience back to Libya. Ashore (2006) and Abofars (2008) stress that the current education system for accountants in Libya is not meeting the needs of professionals. Ahmad and Gao (2004) indicate that the current education practices was one factor influencing the development of accounting professionals within Libya which at the time were to be westernised according to the authors in relation to the market system and Libyan State ownership of the majority of the enterprises. While the traditional education process has had a heavy emphasis on book keeping according to Ahmad and Gao (2004) and needed to be change to reflect the cultural and political structure of Libya. Some of the changes recommended by Ahmad and Gao (2004) need to be altered to reflect the recent market changes and increasing levels of privatisation.

As Ahmad and Gao (2004) argue there needs to be greater cooperation between academia and industry and an increase in the research undertaken within a Libyan context. Tied to the current professional accounting education is the cooperation between universities and bodies in Libya such as the LPCMs who use the graduates to provide their services. Mahmud and Russell (2003) suggest that professionals need to coordinate practices between the workplace and the professional skilling sector such as the university. With interaction between the universities and the working professionals challenges can be identified, investigated and responded too thus enhancing the professionalism of accountants working in Libya. Additionally through strong links between theory and practice the ability to respond to new challenges is improved and undergraduates are prepared to meet the employers' needs. The survey respondents indicated that they believe that there should be co-operation between universities and LPCMs (71 %,). It was interesting to note that Budget Department and Taxation Body of General PC of Treasury interviewees responded that this current study was the first they had participated in a management accounting research study. This shortage of interaction between policy makers, professional practitioners and researchers could have implications for Libyan education and professional practice. If research is not been undertaken how the curriculum currently being taught in the universities can be updated to meet the challenges faced by the largest employers or even understanding of the current business challenges to be developed. With a lack of cooperation and communication between industry and the education sector this will result in graduates who will not be suitable for employees or employees who cannot do the role they were employed for.

This identified cooperation issue was further supported in the survey response which 75.2% of the respondents ranked accounting research in Libya as above average or extremely important. Alawattage *et al.*, (2007) and Wickramasinghe and Hopper (2005) stress that accounting research in developing counties was important to enable these countries to meet the challenges that they faced. The interviewees when asked about why there has been a delay in development and a lack of communication between them and the university sector indicated that research by universities was impacted upon thanks to the Embargo as the universities had difficulties maintaining information links and that practice in Libya at that time stagnated. The interviewees from the Central Government agencies stressed that they want further research to be undertaken to address the challenges in practice through cooperation with the universities. The rationale behind having university involvement was that through university participation in the research process, the current accounting education can be improved as the curriculum will develop as the academic knowledge and skills develop for industry requirements.

Jaruga and Ho (2002) also argue that accounting research was need in developing countries to meet the challenges of a changing economic system. The economic changes were ranked as above average or extremely important by 94.1% of survey respondents. Since the full lifting of the Embargo according to interviewees there have been major economic changes within Libya and some respondents' stated that Libya had entered a new development phase. As part of the new development phase interviewees identified that there are key social and economic problems that had to be addressed to enable Libya to participate as an equal in the regional economy. The delay in development and the stagnation are having long term effects yet Libya has an opportunity to undertake rapid development as they are not the only country in the Middle East who still has traditional accounting practices and archaic systems in place. Ramadhan (2009) identified in Bahrain that there was a need for the country to address the challenges that privatisation and economic development is creating. The General PC of Planning (2008) announced in Libya's State Development plan that there was a desire to continue in the development of diversified local and export income sources including the continuing privatisation of some public organisations. The interviewees confirmed that the government policy to change the economy from an closed to an open market along with other policies including the encouragement of foreign investment within Libya is impacting on them and creating challenges particularly though the current accounting systems. One interviewee in the Budget Department of the General PC of Treasury clearly identified the impact of the developing economic structures and the clash of existing legislation as hindering the development of management accounting practices and thus was impacting on budget preparation, budgetary control and performance evaluation. All the interviewees specifically mentioned that the current legislation needs to be reviewed and updated to meet the political and economic changes in Libya. Al-Akra *et al.*, (2009) in the Jordanian context identified that old legislation was impacting on the ability of professionals to meet the development challenges that they faced as a result of the economic changes. Al-Dhowaihy (2003) points out that for the Saudi municipalities that economic climate and systematic changes affected management accounting practices while identifying that developing countries needed greater research into the factors which impact on their ability to meet these new challenges.

Saleh (2007) suggest that while the economic and political environment impacts on the management accounting of Malaysian local government agencies it is also the influence of the professional bodies that also impact on practice. According to the 70.8 % of the survey respondents' professional accounting bodies in Libya was ranked as above average or extremely important. Iyoha and Oyerinde (2010) highlights that through professional certification in Nigeria the accountability and the decision making process of professionals has improved. Yet when looking at the professional qualifications of those working in the LPCMs there was 79.6% who held the Libyan certification the LCA and the rest held the Arab Certified Accountant status. It was interesting to note that none of the professionals working the LPCMs held any of the various British or American certification recognition statuses. There is no separate certification for management accounting within the Libyan system unlike the British Chartered Management Accountant (CIMA) or its American counterpart the CMA. Since there is no specific recognition or individual certificate for management accountants within Libya there are issues concerning the development of professionalism and professional practice as professional association or certification program would enable the profession to develop techniques through improving the links between theory and practice while improving the organisation of the professionals. With a recognised certification status it would improve the recruitment and career progression of professionals who work in management accounting roles in particular within government agencies. If the government agency such as a LPCMs had way of differentiating candidates the most appropriate personnel from the role could be employed thus addressing the recognised skill shortages and improving the performance of the management structure. Mahmud and Russell (2003) identify that with a UK or USA degree / qualification that Libyan organisations would be able to utilise the professional experience and extended knowledge networks which would impact on available know-how and the implementation of accounting technology. The current requirements for management asks for an undergraduate degree and 5 years work experience but this could be enhanced with the requirement of specific continuing professional development qualifications such as holding CMA. As a Chartered Management Accountant the professional is required to update and maintain their knowledge of current and newly development accounting approaches specifically related to management accounting. Saleh (2004) indicates that accounting research needs to be undertaken within Libya to improve professional practice. A formal agency or membership of a certification program normally has a requirement to maintain their professional knowledge and this could encourage Libyan professionals to undertake management accounting research within a Libyan context to improve their work practice. With increased professionalism within the LPCMs there will implications for the practices and approaches utilised while also improving the confidence and trust of international organisations. The improvement in trust and confidence will lower the current risk assessment that Libyan organisations have and thus open up the access to technology, investment and additional skills and knowledge. The current development plan wants to encourage foreign investment within Libya not only for the financial implications but also to bring skills, knowledge and technology to Libya including modern practices (Libyan State, 2008).

7-5 The differences between the views of Financial Managers, Financial Controllers and Service and Project Mangers in LPCMs towards the current practice of management techniques by their PCMs

When undertaking the analysis of the responses between the three groups of participants a Kruskal-Wallis test was used to analyse and assess if there was any significant differences in their opinions. It was noted that only the Financial controllers had a significant response (ρ =0.01) in their response to motives for budget preparation. This result was for the compliance to Government regulations. When reviewing the individual groups based on the work experience of the financial controllers the lowest mean (μ= 4.25) in this test was for the least experienced at 5 to 10 years worked experience. The high averages between the groups confirms that motive of compliance to Government Regulations was an important factor that influenced the work of the group of participants in relation to budget preparation. Due to this focus on government regulation there is a need to make changes and improvements to the current system including new regulations as this group are not likely to consider other rationale to implement new systems or approaches to improve their professional practice. It has already been identified that the current legislation is over 40 years old and limits the government agencies to the use of traditional manual methods including the use of specific handwritten ledgers and reporting forms. With the current national development plan asking Libyans to expand and develop local industries the local government agencies and other government enterprises will have to participate in this development. One way the local authorities can participate in developing the local market infrastructure is through the implementation of developed nation ideas about the spending of government resources efficiently while reducing the reliance on oil revenue. If the local marketplace businesses that provide services and goods to the municipal councils are required to use competitive market prices and business decisions they are more likely to be competitive with other businesses in the marketplace. In some of the interviews there were reports about a lack of market equilibrium between supply and demand. If LPCMs through their purchasing practices demand better supply chains it will help to bring rationalisation to the market as they are a large player within regional economics. To assist the development of the government agencies the legislation needs to be altered to reflect the new market structure, the impact that the advances in technology can have on the delivery of services and increasing the information utilised in government decision making. Modern management accounting approaches cannot be implemented without legislative reform as the legislation is driving the current rationale of Financial Controllers.

The next significant response for the responses of the various group participants was in budget implementation when looking at who was responsible for implementing the budget based on their individual job role and work experience. The three groups identified that the Service and Project Department was responsible for the majority of the budget implementation spending but are the less responsible group for completing the financial processes (ρ =0.03). This may be because the Service and Project Department while using the expenditure are not responsible for completing all the documents relating to this expenditure. This group may also have to address urgent infrastructure problems but through the lack of awareness about the specifics within the budget are more likely to implement work without the full compliance with the General PC of Treasury directions and regulations. The officials within this department of the LPCMs are not often included the budget process and thus they are unaware of the regulations, General PC of Treasury Guidance and interagency negotiations which were undertaken during the budget preparation process. This lack of awareness of the financial control procedures by Service and Project departments is likely to create difficulties in the financial management of the LPCMs as the Financial Managers and Financial Controllers are focused on the regulatory requirements. This also potentially creates problems in Service and Project departments when necessary expenditure does not occur to support their current projects or in emergency situations such as flooding control measures. In emergency situations such as flooding control measures the Service and Project department does not have the time or potentially a number of service providers to ask for three quotes as required in the regulations to access additional support services to enable them to deal with the current emergency. The current accounting system does not include this stakeholder group as a standard participant so it creates difficulties in the LPCMs provision of services to its citizens.

Kruskal-Wallis test was used to analyse and assess the extent of survey respondents' responsibility for implementing the budget analysed by the work experience of respondent. It was noted that only the Financial Managers had a significant response (ρ =0.01) in their response to budget implementation in relation to their work experience for Administration affairs. The test demonstrated that Administration Affairs managers had the lowest amount of responsibility when compared to the other Financial Managers. The Financial Managers according to their work experience had a range of means (μ range = 2.00 to 3.4). When looking at the spread of means the range jumped between the various years of experience divisions. While the Financial managers with over 30 years experience ranked Administrative Affairs as the lowest group involved in the application of the budget (μ=2.0) this should not be considered odd as those Financial Managers with experience between 11-15 years ranked this with a similar low consideration (μ=2.25). The difference between the range of mean results needs to be considered in this test. As 5 is highly significant while the mean of 3 is a neutral response in the Kruskal-Wallis test the drop from 3.0 for the 26-30 years group to 2.0 in the over 30 years initially looks to be a large jump in the scores but can be explained as slightly less than neutral response by the more experienced Financial Managers. The upper end of the range response was 3.4 so there was no positive result towards Administration affairs participation in the budget implementation. The individual means as a group total had significance as a whole this area, Administration Affairs, was seen by all the Financial Managers as the least response for implementing the budget. This response is reflective of the role that Administration Affairs plays within the various agencies as they have no financial transaction process involvement. None of the interviewees mentioned Administration Affairs as an active participant in the monetary controls for LPCMs.

An attempt to determine the significant differences between the views of participants regarding the importance of selected factors which have impact the application of management accounting techniques in LPCMs. the results explored that there are no significant differences between the overall views of participants and those participants recognised that all factors are important and have an impact on the application of management accounting techniques. Although, there are some significant differences between the financial controllers' views according to their work experiences about the professional accounting bodies in Libya (ρ=0.02), accounting research in Libya (ρ=0.01), accounting education in Libya (ρ=0.01) and economic changes (ρ=0.01) as important factors that have affected the application of management accounting techniques in LPCMs. When looking at the ranges across the various years of experience divisions for Financial controllers it appears that for financial controllers who have over 30 years work experience have considered professional accounting bodies and accounting research in Libya to be lower level factors that impact on the application of management accounting in LPCMs. The mean (μ=3.00) for the Over 30 years division in Professional accounting bodies is described as neutral neither strongly agreeing or disagreeing that these impact on management accounting practices. The other division fall within the slightly agreed response. Looking at accounting research again the Over 30 years experience group of financial controllers' had the lowest mean(μ= 3.50) .This bottom of the range was closer to slightly important and the rest of the means were clustered above 4. In the other two factors accounting education and economic changes this Over 30 group had the same response to other participant age divisions. The lower responses by the Over 30 group for the first two factors could be an indicator that they have not benefited from an association with their professional body including research which is relevant to their practice area. As previously discussed there needs to be greater cooperation between accounting education providers and the development of curriculum to address the needs of Libyan practitioners and the significant response to these four factors indicates that the ideas expressed by interviewees confirm the underlying perceptions of the survey respondents within the LPCMs.

7-6 The strengths and weaknesses of a management accounting practice in use within LPCMs.

From the research process the key weaknesses within management accounting practices within LPCMs was attributed to the aging legislation, Financial Law 1967, which controls the financial and management accounting practices within Libyan government agencies. The legislation requires the LPCMs to use traditional methods for the application of management accounting techniques. Due to the strong ethos for compliance with the legislation as a result of the age and dominance of this legislative act with LPCMs there is limited or no emphasis on the efficiency and effectiveness of LPCMs 'performance. Additional the Financial Law 1967 creates difficulties with the General PC of Treasury when item budget amounts are transferred to another item allocation.

The systematic restrictions on LPCMs from Financial Law 1967 is creating issues in the budget preparation, budget implementation and budgetary control system as Libya's business environment is developing in the new global open market system. The application of responsibility and accountability for the various financial process needs to be reviewed to enable those who are impacting on the implementation to be involved. Such as Service and Project Department managers while spending a large part of LPCM budget not been aware of the reporting requirements and not been held to meet these reporting requirements. Another example was where internal auditors are excluded from the budget preparation process but they have valuable information to provide on difficulties that have previously have occurred during budget implementation. This additional guidance would enable repeat issues to be overcome.

The variance between expected and actual revenue creates difficulties for the LPCMs and this again a result of the record keeping limitations from Financial Law 1967. Without modern management accounting techniques the revenue variance issues will not be resolved as the system does not provide the information systems needed to flag that there income shortages which need to be addressed. Coupled with traditional recording approaches and the lack of Information Technology skills amongst Financial Department staff members there is also a shortage of qualified accountants within financial departments and this not only impacts on income but also on their ability to complete the required budgetary control documentation.

Strengths within the management accounting techniques in place within LPCMs indelicate that there is strong analysis of the revenue and expenditure in regard to their specific nature helping to distinguish between capital and normal expenditures and to determine normal and abnormal revenues. For example, revenue is divided into revenue from municipal fees, taxes, grants, sales, penalties and other revenue, whereas expenditure is divided into salaries and rewards, operational and services. There is a strong formalised process where the revenue and expenditure budget play an important role for providing information for planning, controlling and monitoring. There is a defined reporting process which provides clear and accurate budgetary control reports to central government bodies which are utilised for performance evaluation of the PCMs. As result of the budgetary control report there is justification of the positive and negative variances provided through the use of management accounting techniques.

7-7 Summary

In this chapter a discussion has been undertaken. The key statistical analysis results have been presented and explained to highlight the implications to practice within LPCMs. The external and internal factors that have affected the management accounting practices in the LPCMs are mentioned and supported with Literature to highlight the effects they create within these municipalities. Areas for concern within the Libyan environment have been identified so that future LPCMs performance could be improved such as shifting to more modern management accounting techniques, development of professional education and professional bodies. Finally the strengths and the weaknesses of the current LPCMs environment has been analysed so that a current post Embargo of Libya's public finance control processes are described in relation to the effectiveness of management accounting techniques.

The next chapter will cover mainly the contributions to knowledge and the limitations of the study. Recommendations for professional practice and future academic research will also be made including how LPCMs can utilise best practices from other developing countries in the region to address similar issues along with how to benefit from the special characteristics of the Libyan environment.

Chapter Eight

Chapter Eight

Summary and Recommendations

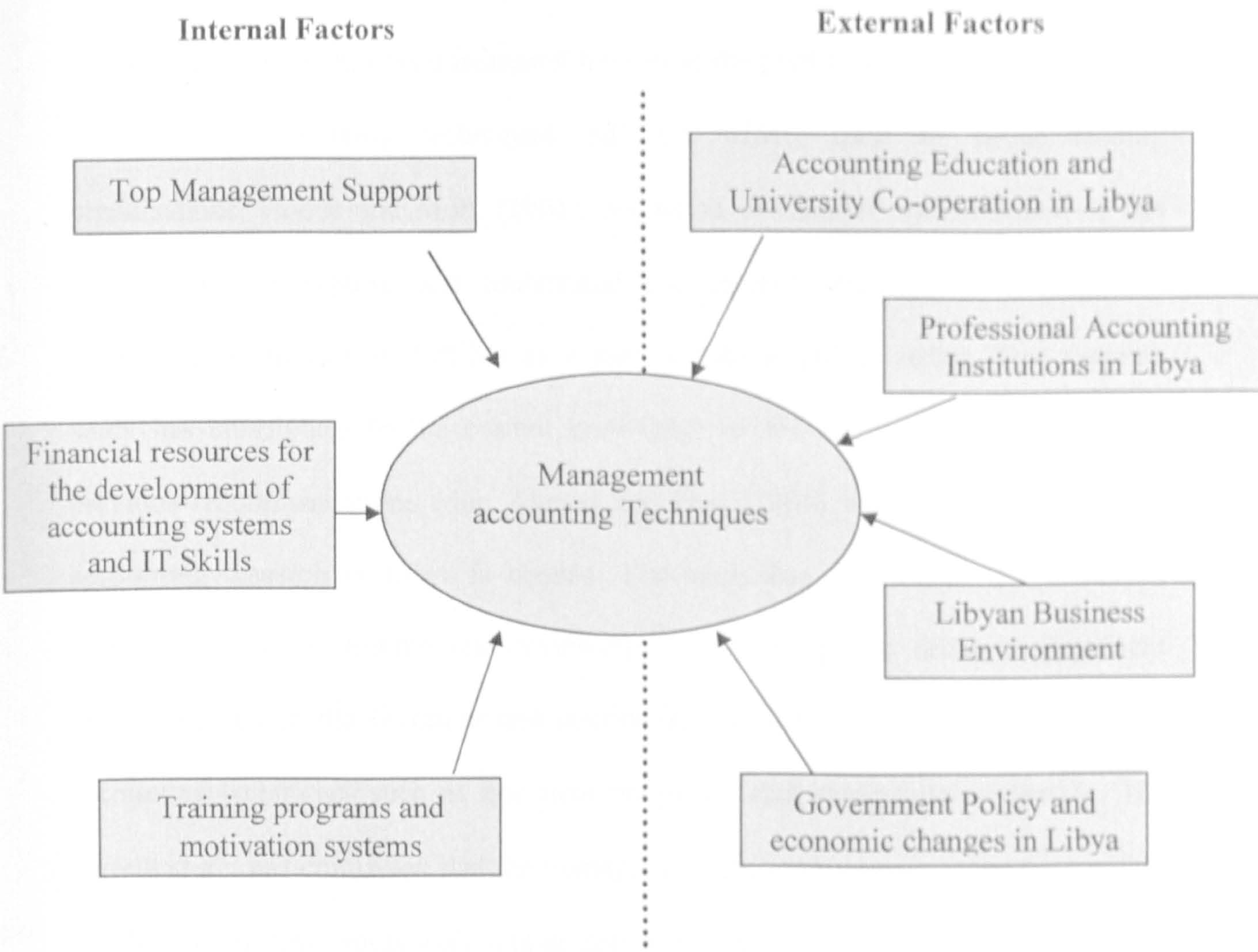
8-1 Introduction

This chapter presents a general summary and conclusion to this study. The aim of this study was to examine the current practice of management accounting techniques utilised in LPCMs. In particular, the study set out to investigate the role of planning, control, decision making and performance evaluation. Selected factors have been analysed in detail to gain an overview of their effect on these roles. Understanding of the current context has underlined especially after the final lifting of UN sanctions on Libya to identify the effectiveness of management accounting techniques in this sector. This chapter is divided into seven sections. The first section provides a summary of findings and the study's research questions. The second section highlights the contribution to knowledge while the third section states recommendations to enhance the effectiveness of management accounting techniques in LPCMs. The fourth section identifies areas for further research while the penultimate section identifies the limitations of the study. The last section gives a final conclusion to the whole study.

8-2 Summary of Findings

This study has been undertaken over an extended period of time to gather the current overview of LPCMs practices in relation to management accounting techniques. Through the investigation of the current practice of management accounting techniques in budget preparation in LPCMs the organisational structures and responsibility within the cash based process was identified along with the usage of traditional management accounting approaches. The study found that the Financial Law 1967 has a strong influence on all the management accounting processes utilised in LPCMs through compliance with government regulations, policies and practices to ensure the target of protecting public resources. The use of computerisation is not utilised to provide efficiency and timely budgetary control reporting creating disparity between the various agencies involved in the control process. The main purposes of budgetary control information are to ensure that the actual expenditures and revenue are in line with the proposed budget. There is under utilisation of non-financial output measures and this lack of information collection makes effectiveness and efficiency reviews difficult as performance, such as customer support, is not being tracked within LPCMs. The General PC of Inspection and Control and General PC of Treasury are responsible for performance evaluation of LPCMs. There is a well defined long term centralised financial planning approach in place for development planning. Mid- term planning has limited use in LPCMs for specific political projects. There are eleven factors identified by the focus group and participants which impact on the practice of management accounting techniques within LPCMs. These factors are listed in a copy of Figure 6-4 on the next page which has been reproduced for the convenience of readers below in Figure 8-1. Taking into account all these factors issues were identified that reduce their effectiveness as the recommendations from this study are presented later in this chapter providing possible methods to improve management accounting application within Libya.

Figure 8-1: Replication of the factors affecting applications of management accounting techniques



Strengths within the current system were identified using formalised procedures for revenue and expenditure analysis using management accounting techniques and the role that this financial information plays in providing information for planning, control and monitoring within LPCMs and in Central Government. A key weakness identified was the focus on Financial Law 1967 for compliance as there is limited or no emphasis on performance efficiency or effectiveness. This piece of legislation also creates systematic restrictions and impacts on the application of management accounting techniques.

8-3 Contribution to Knowledge

In recent years there has been increased interest in the public sector, in the adoption of management accounting techniques that are widely used by profit seeking organisations, Hoque and Moll, (2001). As stated in Chapter one Section 1-3, this study seeks to explore and understand the current practices of management accounting techniques in LPCMs as a part of Libyan public sector. This research study has contributed to the current knowledge of the Libyan context addressing previous recommendations from Ahmad and Gao (2004) who advised that further accounting research in Libya is needed. The study has contributed to the Libyan knowledge base by linking and reviewing the current public sector management knowledge within the literature and confirming the use of traditional management accounting techniques such as line item budgeting and incremental budgeting. The current study has confirmed that the management accounting approaches used within LPCMs do not link inputs with outputs and therefore these approaches fail to address or achieve the efficiency and effectiveness of resource use in LPCMs' activities. This study pointed out that the Libyan economy has changed from a centrally planned to a market-based system, and therefore justifies the rationale to use modern management accounting techniques such as planning programming budgeting within the LPCMs to deliver efficiency and effectiveness of their services.

This shows that central authority rather than market driven forces still determine the type of management accounting techniques employed, this reflect the power structure between LPCMs and General PC of Treasury.

Consequently, this study has provided a number of important contributions to theory, as well as the implications for management accounting practices are discussed below.

8-3-1 Contributions to Theory

Therefore, according to the review of the relevant literature and in the light of the research results, the following are the research's main theoretical contributions are:

1- This study makes a contribution by expanding the limited studies on management accounting practices conducted in developing countries in general and within the Arab countries in particular. Further, there are no previous studies that have been carried out and provide a detailed extensive explanation and analysis of LPCMs application and practice of management accounting techniques. This study also identified the factors that have an impact on these practices within LPCMs.

2- This study is the first attempt to explain and understand the current practices of management accounting techniques in LPCMs. Therefore, it contributes to the accounting literature of developing countries especially the Libyan accounting literature by identifying a new area in this literature, and thus this study bridges a gap in the existing literature and makes a good foundation for future research and provides the basis for a comparative study with other previous studies in developing countries, particularly Arab countries, conducted in the same subject area, and it provides information that enriches the accounting studies in general and management accounting in the Libyan public sector in particular. This knowledge source can assist other Arab nation researchers by providing a contextual base line for comparative studies.

3- This study has provided a contextual analysis of the current management accounting techniques and their effectiveness within LPCMs. The study has identified that there are formal system processes in the Libyan state for planning, control, decision making and performance evaluation. This contribution increases the global knowledge of Libya and creates greater awareness in the governance of this developing nation.

4- As part of the study, formal flow charts of processes have been developed and this clarification of the internal processes within LPCMs will help future external businesses in their dealings with these organisations. Researchers will also benefit from the knowledge development assisting future studies by providing a common base point from which to gain further clarification and understanding of LPCMs processes.

5- This study however contradicts previous literature from Alzne (2006) and found that modern management accounting approaches are not being utilised within LPCMs due to the legislative restrictions of *Financial Law (1967).*

6- This study provides a list of internal and external factors which impact on the application or implementation of management accounting techniques. Through the use of these factors, future studies will be able to undertake comparative studies to confirm or provide further insights into how these factors impact on the application of management accounting techniques in developing countries.

7- Another important contribution made by this study is that there is a significant difference between the participants' views towards the current practice of management techniques by their LPCMs. This is an important contribution to knowledge as no previous studies in Libyan public sector have explored this comparison.

8- This study used statistical techniques, namely descriptive analysis and the Kruskal-Wallis test to provide a comprehensive insight into the management accounting practices, and the impact of the several factors on these practices. A combination of these techniques is rarely found in the existing literature especially in developing countries.

9- This research utilises the triangulation concept and provides further evidence that using both quantitative and qualitative methods in a single piece of research is complementary rather than being incompatible for management accounting research.

8-3-2 Implications for Management Accounting Practice

The implications for current management accounting practice arising out of the study are as follows:

1- The study provides findings that can be generalised to countries at a similar stage of development, and with a similar culture to Libya such as the Arab Maghreb Union Countries (AMUC) and other Arab countries.
2- The findings achieved by this study will be valuable to the LPCMs and central government bodies as well as the others, which are interested in the same sector. The study assists relevant governmental officials to understand the

current practices of management accounting techniques, helps them to identify any weaknesses in their agency's application of these techniques, and provides possible solutions to overcome existing shortcomings in current practice. This will contribute to the development of theory and practice of management accounting within Libya.

3- This study will help the administration officials and accountants, and allows them to evaluate and develop their management accounting practices by identifying the factors they have to take into consideration when deciding to adopt new practices, and evaluate the factors that have caused problems in the current practices in the Libyan business environment to meet requirements such as the growing need to monitor and improve LPCMs' performance.

4- This study provides additional evidence to support the review and update of *Financial Law (1967)* confirming previous literature advice that the legislation must be relevant to the current market situation (Claassens and Van Zyl, 2005; Curristine and Bas, 2007; Ramadhan, 2009).

5- Within Libya there are some systematic similarities to Saudi Arabia and therefore Al-Dhowihy (2003) discussion can be utilised to review the Saudi development strategies and assess them further for their suitability to be included within Libya's ongoing development strategy.

6- Systematic issues were identified so that further development and research could be undertaken in Libya. This includes identifying areas such as the need for greater accountability within parts of LPCMs for their transactions and greater participation by stakeholders in activities which impact on their key organisational role. An example of this is participating in budget development for internal auditors as this decision making process impacts on their control of the budget implementation process.

7- Libyan Development Plans since 2001 tended to improve efficiency and effectiveness in public services, such as education, health and municipal services through training programs, importing IT and modern software. But, the findings of this study are consistent with the findings of Mahmud and Russell (2003) who state that there is a lack of computer availability coupled with not having staff with the necessary computer skills in the public sector. Waweru *et al.*, (2004) indicate that this lack could obstruct management change. The findings of interviews also supported that the use of computer systems affecting the implementation of management accounting techniques. It should be noted that the staff should receive additional training to enable them to have the skills and knowledge to perform their roles effectively along with legislative reforms to use a modern technology in the management accounting system.

8- The current education system for accountants in Libya is not meeting the needs of professionals (Ashore, 2006 and Abofars, 2008). The study participants stated that accounting education is important for the implementation of modern management accounting techniques within Libya and that due to current education curriculum there is a discrepancy between the theory and the workplace. Ahmad and Gao (2004) specify that the current accounting education practices influenced the development of accounting professionals within Libyan public and private sectors enterprises.

8-4 Recommendations

1- Financial Law (1967) needs to be updated so that modern management accounting techniques can be implemented requiring LPCMs to be more efficient to face the challenges of the new open market structure and to support the Libyan State (2008) development plan by reducing the dependence on oil revenue. An update of the current public and government control legislation as it is archaic and the minor amendments made in 2008 are not evenly implemented across all the LPCMs within Libya. The literature (Mahdavi and Funnell, 2003; Saleh, 2007; Oliorilanto, 2008; Saleh and Pendlebury, 2010) supports the need to change the accounting system from cash based to a modern approach (accrual accounting basis). This view is supported by participants who suggested that this was not going to happen without legislative reform. Legislative reform is required to improve the ability of local and central government agencies to meet development challenges that the new global market infrastructure is creating within Libya. By updating the current legislative control this will develop the accounting systems, regulations and help Libya to keep pace with current practices in modern developed countries.

2- Changing of the current accounting system from cash to accrual will also enable better budget development as currently the budget is dependent on figures which do not reflect the efficiency or the effectiveness of expenditure as public funding is undermined by the focus on compliance with *Financial Law* (1967). The move from traditional to modern management accounting approaches will also assist in improving the control of deviance such as fraud and corruption thus improving the performance of LPCMs in the provision of services to their regional areas. With better information available through systematic changes, the quality of decision making, control, and performance evaluation is likely to increase and there will be greater opportunities to improve accountability.

3- LPCMs should employ rational effective budgeting approaches such as the planning, programming budgeting approach especially in development plans preparation by introducing clear objectives and measuring performance against the given objectives and goals.

4- Accountability for government officials need to be addressed in several areas. This includes allowing Audit Office officials to participate in the LPCMs budget development process as these officials would be able to provide information to enhance the future performance and effectiveness of the finalised budget. This accountability also requires greater financial participation by Services and Project Departments so they improve their awareness of the formal control procedures and made more accountable for their financial transactions.

5- Another method which could also improve accountability would be the use of performance indicators and undertaking a formal performance management process within LPCMs to ensure their effectiveness and efficiency. The current performance indicators only utilise financial information and the use of non-financial information could be expanded to provide performance assessment of LPCMs in the provision of services and value for money assessment of public projects. If LPCMs become more accountable to the public for their actions and performance in the disbursal of funds it is likely to improve LPCMs effectiveness and efficiency.

6- While there is still instability within the supply and demand structures within the Libyan economy and the impact of fluctuating oil revenue prices for the calculation of projected revenue and expenditure, the current three year budget averaging process should continue especially while the cash basis is being used as it is difficult to calculate a realistic framework and provide a tangible form of guidance to the expenditure and income figures.

7- The current focus on spending the entirety of the budget does not enable LPCMs to make decisions regarding efficiency and effectiveness of their spending and does not encourage Financial Managers to obtain value for money in purchasing. With an alteration in attitude towards the spending of the budget and the removal of any penalties for failing to complete spending the budget LPCMs with appropriate justification, could start to develop a better reserve (contingency) system for emergency measures and it would also help in the stabilisation of the local market as LPCMs, being large organisations can affect market demand. If LPCMs start to demand value for money the pricing as a key stakeholder they can force through their control of the demand curve a change in the supply pricing in the new open market structure. This focus on value for money will also be supported with a change from the traditional management accounting approach with the implementation of modern management accounting approach. Ramadhan (2009) pointed out in Bahrain that the budget control process does not enable value for money assessment and thus does not enhance the performance evaluation of its public sector.

8- The current system does not fully utilise medium term planning. It is recommended that medium term planning (1-3 years) planning is utilised as this planning would enable LPCMs to monitor the effectiveness and efficiency of the projects they undertake while also providing greater flexibility in reaction to unforeseen situations such as the global crisis. The current development plan would not have been able to be used to address this issue as when it was developed it was not on the radar. Additionally the use of medium term planning could help in the project management of foreign investment contracts and projects as these are often controlled by medium terms of 1 to 3 years. The use of a 1 to 3 year Development plan can also be linked with the improvement of the efficiency and effectiveness of LPCMs in their performance. Through the use of medium term planning LPCMs can address performance issues identified and thus improve public satisfaction and project effectiveness. Al-Dhowaihy (2003) identified that the use of medium term plans in Saudi Arabia provided organisational benefits including greater reaction capabilities to global factors and improving performance in international markets. Through the implementation of medium term plans LPCMs could also improve their compliance with the State Development Plan which wants to improve local business performance and export competitiveness (Alkaleb, 2009).

9- It is recommended that the current infrastructure within Libya needs to be improved to enable communication and greater ease to respond to global and national demands. With a better infrastructure within the country this will impact on the performance of LPCMs including improving the communication of the budgetary control reports. Additionally through improving the interagency communication the current pressures on Financial Controllers and Central Government bodies will decrease as they will be able to improve in their required reporting. The study identified that there were issues between various agencies about the timeliness of reports and the pressures to meet reporting requirements. If LPCMs are able to quickly complete the reporting requests it will also impact on the revenue as Financial Controllers will not feel it necessary to withhold funding as a bargaining point when trying to get the financial reports they require for central government. The stability of the market structure could also be improved by the stability of the LPCMs funding as the LPCMs supply chain would gain stability in their reimbursement and thus improve the perception of foreign companies undertaking Libyan development contracts. It was also noted that infrastructure difficulties undermined some of the control processes according to the interviews and this has a secondary impact on the accountability within some LPCMs.

10- The transfer from cash to accrual base will require infrastructure development with LPCMs and Central Government bodies to enable this change to occur. Part of the infrastructure development within LPCMs and Central Government includes the use of IT and the development of the existing Information Technology networks to improve communication. Currently the use of

Information Technology systems is underdeveloped and restricted due to the legislative compliance requirements within Financial Law (1967). After addressing the legislation LPCMs will need to address their use of IT to improve in efficiency and effectiveness and this will also lead with greater ability to monitor and review revenue collection. If staff are more aware of the pressures through the accrual process of the issues that their agency has, including the amount of outstanding revenue and the need to cover the expenditure, they are more likely to be motivated to active in chasing the outstanding revenue to address any funding shortfall.

11- Staff recruitment for financial roles within LPCMs needs to ensure that the most appropriate person for the position is employed and therefore have the skills and experience to meet the organisational requirements. To ensure that professionals maintain and develop their skills and knowledge LPCMs need to include incentive schemes in the workplace to encourage their staff to further develop their knowledge and skills and undertake greater effort increasing their performance in the workplace. The lack of awareness of post graduate training indicates that LPCMs are missing opportunities to bring new ideas and practices into their organisations.

12- Current staff need support in the development of skills and this could be done through professional development such as that offered by professional associations. Currently the professional organisation, the LAAA, does not include all accounting and auditing practitioners with Libya as it excludes those working in the public sector. If current accounting professionals working in the public sector are active participants in a professional association, they are able to access and participate in professional development programs and develop their understanding of private industry accounting practices.

13- With a strong professional organisation representing all participants, industry or sector changes can be undertaken including the lobbying of legislative bodies to increase the professional standards or legal requirements for practice. It was identified that the top management in central government do not currently have support from the Legislature to change legislation to address the specific needs identified in the Libyan economic market system. A strong professional body needs to be developed to ensure that the current lack of support by the legislative officials can be addressed. Another way in which the LAAA could strengthen their position as the leading professional organisation, would be to include an increase in professional development opportunities for their wider membership with the development of Chartered certification.

14- The links between the profession in practice needs to be strengthened with the current professional education system. The LAAA could enhance the curriculum development by bringing industry consultation to education providers and improving the current education provision and curriculum within Libyan educational institutions. Currently the requirement to comply with *Financial Law (*1967) influences the education curriculum as there is not enough focus on modern management accounting techniques and this impact on qualified professionals as they are not skilled or knowledgeable to address this area of management accounting. For curriculum development, the LAAA could also encourage the improvement of links between the universities and LPCMs. Researchers from academia could and should undertake further research to help these organisations to identify and address the challenges they face in conducting their business.

15- With development expectations by citizens and the increased involvement of international organisations in Libya, infrastructure demands will increase and this includes the improvement of service provision and performance evaluation. Information is needed to enhance the decision making process and, without modern management accounting systems in place, managers will not be able to address customer demands for improved performance. The lack of standardisation of performance requirements has resulted in some underperformance which has led to difficulties in transparency and accountability and the current goal of the legislation is to protect public funding. LPCMs need to respond to their municipal citizens and to the requirements of government thus the demand from stakeholders needs to be addressed. The use of performance information is one way that LPCMs can address the demands from the various stakeholders to ensure that their service and provision is effective and efficient.

16- From the discussion and the process of undertaking the study a greater awareness was developed that further research within Libya needs to be undertaken. A number of study areas have been identified but are listed below in further research. The current literature for accounting in Libya needs further development to improve the links between theory and professional practice.

8-5 Limitations of the Study

The scope of this study is to examine the current practices of management accounting techniques within the LPCMs. Therefore, the researcher conducted this research to obtain a better understanding of the management accounting techniques in LPCMs. From the literature review and the interviews it appears that this is the first study to investigate the current practices of management accounting techniques and attempts to identify some of the factors that influence these practices within the LPCMs. Furthermore, it is beyond the scope of this study to identify and include all the possible factors that may influence the practices of management accounting techniques in LPCMs.

Like any other studies, this research has limitations in its methodology and methods. The primary data collection method in this research was the survey questionnaire (see Appendixes A) and, like the interviewees identified, the study was required to use an infrastructure alternative to address issues as a result of transport and mail system inefficiency within Libya. The different shortcomings interviews have been discussed in detail in chapter four. Some of the shortcomings of questionnaires can be outlined as follows:

- The shortcoming of the questionnaire is related to the target respondents where the researcher could not be sure who has completed the questionnaire, whereas some financial controllers have different activities in different places as well as services and projects managers have field work. Thus it was not easy for the researcher to reach them directly.
- The questionnaire also provides no opportunity for clarifying questions or for overcoming any unwillingness to answer particular questions. During the

questionnaire design stage, various actions were taken to tackle these two limitations, including the review of initial questionnaires by experienced academic staff and PhD students at LJMU who have enough knowledge and experience in Libyan accounting.

In addition there are various limitations of this study:

The majority of the recommendations are specific to the Libyan environment since Libya is the context of the study however the findings and some of the recommendations can be extended through generalisation to countries with similar development and culture such as AMUC. The study findings relate only to LPCMs while other sectors in Libya were not considered. In addition to the aims of this study and the small population size resulting from the restructuring during the research process of Libyan Public sector municipality organisations and the large geographical area that allowed only for the specific methodology followed in this study. Between the infrastructure constraints of transport, communication and funding and the cultural reluctance to participate the researcher was constrained in the selection of instruments and final participants. These limitations impact on the study breathe but this could not be addressed in this study process.

The use of statistical analysis in this study aimed just to provide description to the current practices of management accounting techniques in LPCMs as there was a lack of published reports or literature which provided this information to the researcher. Therefore conclusions reached are mainly based on the descriptive statistical analysis with the supported clarification from the interview process.

These limitations have had little impact as the study has succeeded in producing evidence about the current practices of management accounting techniques within the LPCMs. This study also has highlighted the influence of selected factors on these practices. This research provides a platform for further research and analysis of management accounting system in Libyan public sector.

In summary, it was important to link the theoretical framework, the research design, the data collection methods, the sample and the statistical analyses conducted in this research with previous management accounting practices literature to locate the significance of the current research in covering the gap in literature in developing countries. The research was an attempt to unveil the very complex nature of the phenomena of an emerging economy that is going through dramatic economical, social and political changes. Despite the noted limitations, this research contributes to the understanding of the factors that have affected the management accounting practices in LPCMs and the recent management accounting practices.

8-6 Future Research

The main objective of this section is to highlight areas where further research might be pursued in order to contribute to the understanding and advancement of management accounting systems within LPCMs. Therefore, the time gap between surrounding environmental changes and changes in management accounting techniques requires further studies in the future to verify whether or not LPCMs have modified the application of their accounting system to meet the new economic changes, and reasons for not modifying the application of their management accounting techniques either comparative studies should be undertaken between management accounting system in LPCMs and other municipalities in developing countries and developed countries. A similar study should be done to investigate financial accounting and reporting practices in LPCMs.

From the discussion there have been similar exploratory studies are needed to investigate the current management accounting techniques in other important Libyan public sectors, such as the police, education, health and central government in addition to financial services sector.

To address the issues with *Financial Law* (1967) there needs to be further research into current international standards and how they can be adapted to provide legislation that meets Libya's legislative regulatory requirements while enabling national development.

If the Legislative changes are made in Libya to address the dated legislation further research will be needed to identify the best practices available to support the transition from cash accounting to accrual accounting.

In the interviews it was identified that there is some deviance in the accounting system and practices of LPCMs. Further research is required to assess the level of deviance and describe its nature and impact levels on LPCMs including how it affects the performance of these agencies.

If and when LPCMs move to modern accounting practices there is an opportunity for additional research into how these agencies can identify the effectiveness of expenditure including development of proposed expenditure tools to assist in the analysis of the proposed expenditure for it validity and reliability.

There are opportunities for organisational and organisational cultural research to be undertaken. The organisational cultural attitudes were not identified and the impact of the Embargo has delayed the development of Libyan research. The limitations that this study encountered could have been due to organisational cultural issues or just cultural issues specific to Libya. Further research into organisational practices could also help explain and address the current recruitment practices within LPCMs.

The study focused in the government agency control and administration of financial processes for LPCMs performance. Other stakeholder groups such as the municipality citizens need to be considered and there is an opportunity for citizen satisfaction and desire for governance accountability to be investigated.
The current professional development needs of accounting professionals within public agencies were identified by the interview participants as one of the factors which impact on the management accounting techniques of LPCMs, additional investigation needs to undertaken to identify the opportunities for curriculum development and specifics of issues which professionals encounter in practice.

The impact of the Embargo was identified by participants to still be a factor which effects the Libyan environment so there is an opportunity for further research into the long term effects that this historical event has had on the development of the country.

8-7 Final Conclusion

From the study the key recommendation to improve the current practices of management accounting techniques within LPCMs was to move from cash to accrual to aide in the implementation of modern management accounting. The determination factor which controls this move to modern management accounting is legislative reform with the antiquated legislation of *Financial Law* (1967) updated to provide appropriate support to the accounting and governance needs of a modern developing country that wishes to be competitive in a global economic market. With the systematic change to the legislation the development restrictions which are effecting professional education and practice will be reduced. Previous studies have identified that there needs to be further development of accounting practice including legislative changes and professional education (Ahmad and Gao, 2004; Pratten and Mashat, 2009) but these changes have not been undertaken. The development of accounting education and improvements in University cooperation with LPCMs professionals will create opportunities in the public sector .A strong professional body will enhance practice by providing professionals and organisation with skills, knowledge and support to address challenges in professional practice. Libya needs to develop the country's infrastructure including the infrastructure within LPCMs to address the development needs and State Development Plan goals. The current effectiveness and efficiency of LPCMs performance from the current systematic approach is not measureable or achievable. To improve the decision making and performance of LPCMs practice change is required. With the implementation of modern management accounting approaches LPCMs will have the information they need so that they can respond to the rapidly changing global environment that they are working in.

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Appendixes

Appendix A
Questionnaire

الجماهيرية العربية الليبية الشعبية الاشتراكية العظمى

اللجنة الشعبية العامة للتعليم العالي

المعرفة حق طبيعي لكل انسان

الرقم الإشاري: د.ب.ع/5/14 ...8014

التاريخ: / /

الموافق: 28/10/2007م

إلى من يهمه الأمر

بعد التحية ،،،،،،،

تفيدكم إدارة البعثات الدراسية بأن الطالب / عبدالعزيز رجب امحمد الطهار من ضمن الطلبة الموفدين للدراسة العليا بالخارج لتحضير درجة الإجازة الدقيقة في مجال المحاسبة بالساحة البريطانية .

علية نأمل منكم مساعدتة في الحصول على البيانات اللازمة لغرض دراسته.

و السلام عليكم ورحمة الله وبركاتـــه،،،،،

د. [illegible]

مدير إدارة البعثات الدراسية

Dear respondents

I am currently engaged in research for PhD at Liverpool John Moores University, UK. I am particularly interested in management accounting techniques in Libyan people's committees of municipalities. So, the purpose of this survey is to collect some of the research data.

I would like to invite you to participate in this research by completing this questionnaire (from your own experiences) which should take no longer than 20 minutes to complete. I have left space to write if there are any notes you think that might contribute in improving this research.

I would like to assure you that all responses to the questionnaire will be kept confidential.

Thank you very much for your cooperation.

Yours faithfully

Abdul Aziz Rajab M. Tahar

Ph.D. student

Business school

Liverpool John Moores University

E-mail: A, R, - Tahar@2007.ljmu.ac.uk

A questionnaire on management accounting in Libyan people's committees of municipalities

Part One: General information

The following questions have several responses. Please answer these questions by placing a tick (√) in the box of the appropriate response or fill the gap according to the nature of the question.

Section A:

This section is for general information about the respondent.

A-1-1- What is your job title in the people's committee of municipality?

☐ Financial managers ☐ Financial controller ☐ Managers of services and projects
☐ Other (please specify)....................

A-1-2- Which is the highest academic qualification you hold?

☐ PhD degree
☐ Master degree
☐ Higher diploma
☐ Bachelor degree
☐ Diploma/ Secondary
☐ Other (please specify)....................

A-1-3-What is the field of your qualification?

....
....

A-1-4- Your work experience in this field is:-

☐ Under 5years ☐ 5-10 years ☐ 11-15 years
☐ 16-20years ☐ 21-25years ☐ 26-30years
☐ Over 30years

A-1-5- Your age is:-

☐ Under 25years ☐ 25-35years ☐ 36-45years
☐ 46-50years ☐ 51-55years ☐ Over 55years

A-1-6- is your accounting staff encouraging to participate in accounting training and education programs?

☐ Yes (please indicate the extent of the encouraging) ☐ No

Never	Rarely	Sometimes	Often	Always

Section B:

This section is for general information on your people's committee.

B-1-1- What is the name of your people's committee of municipality?.......................................

B-1-2- The number of employees in your people's committee of municipality is:-

- ☐ Less than 100employees
- ☐ 100-150employees
- ☐ 151-200employees
- ☐ 201-250employees
- ☐ 251-500employees
- ☐ 501-1000employees
- ☐ Above1000employees

B-1-3- Please state the number of employees working in the financial department, according to their qualifications:-

Classification	Number of employees
Employees without qualifications	....
Employees a business administration degree	....
Employees with an economics degree	....
Employees with an accounting degree	....
Employees with a commercial intermediate diploma	....
Other (please specify)...............	....
Total number of employees in financial department	....

B-1-4- Please state the number of employees in your people's committee of municipality who hold the following professional qualifications.

Professional qualification	Number of employees
Libyan Certified Accountant (LCA)	....
Arab Certified Accountant (ACPA)	....
British Chartered Certified Accountant (ACCA)	....
American Certified Public Accountant (CPA)	....
British Chartered Institute Management Accountant (CIMA)	....
American Certified Management Accountant (CMA)	....
Others (please specify)...	....

Part two: Management accounting techniques in Libyan people's committees of municipality

Section A

This section is about the budget preparation and development plans in your people's committee of municipality.

A-2-1 Does your people's committee of municipality has these budgets?

If yes, please indicate the importance of the budgets to your people's committee of municipality.

1= unimportant. 2= below average importance. 3= average importance. 4 =above average importance. 5= extremely important. 6= not applicable.

Budgeting	1	2	3	4	5	6
Revenue and Expenditure budget (annual budget)						
Monthly Labour budget						
Cash budget						
Monthly Materials budget						
Other (please specify).......................................						

A-2-2 Which of the following are responsible for preparing the budget?

Responsible	
Budget committee	
Top management	

A-2-3 Which of these departments are members of the budget committee?

The members	
Audit office	
Financial department	
Planning statistics department	
Financial controller	
Service& Project department	
Administration affairs	

A2-4 What is the basis of budget preparation?

The basis	
Cash basis	
Accrual basis	
Modified cash basis	
Other (please specify).......................................	

A-2-5 Which of the following data as starting point for budget preparation?

Data	
Average original budget for last 3 years	
Modified budget for last year	
Original budget for last year	

A-2-6- Do you use any of the following methods in budget preparation?

Methods	
Line-Item Budgeting &incremental budgeting. (traditional technique)	
Zero based budgeting.	
Planning, programming budgeting	

A-2-7 Does your people's committee of municipality prepare a budget for these motives?
If yes, please indicate the importance of the following motives to your people's committee. 1= unimportant. 2= below average importance. 3= average importance. 4 =above average importance. 5= extremely important.

Motives	1	2	3	4	5
Controlling and monitoring					
Compliance with government regulations					
Guidance for decision-making					
Performance evaluation					
Planning for the future					

A-2-8 Budget preparation can range from highly centralised to highly decentralised could you please indicate the extent to which the budget preparation in your PC is centralised?

Level of centralization	
Not centralised at all	
To a limited extent centralised	
To a moderate extent centralised	
To a considerable extent centralised	
Completely centralised	
Total	

A-2-9 Which of the following data as starting point for development plan preparation?

Data	
Last 3 years development plan	
Last 5 year development plan	

B-2-10 Does your people's committee of municipality prepare development plans for periods?
If yes, please indicate the extent: 1= never, 2= rarely, 3= sometimes, 4= often, 5= always

Periods	No	Yes	1	2	3	4	5
For a period of 1 to 3 years							
For a period of 4 to 5 years							
For a period of over5 years							
Other (please specify)....................							

A-2-11 To what extent are those members responsible for implementing the budget according to its related operation?
1= Not at all, 2= Small extent, 3= Moderate extent, 4= Considerable extent, 5= Completely.

Member	1	2	3	4	5
Audit office					
Financial department					
Planning department					
Service & Project department					
Administration affairs					
Financial controller					

Section B:

This section is about budgetary control in your people's committee of municipality.

B-2-1 The period for providing reports of budgetary control information from financial department is:

Monthly	Quarterly	Half yearly	Annually	On demand

B-2-2 To what extent does your people's committee of municipality provide budgetary control information to controlling bodies?

Never	Rarely	Sometimes	Often	Always

B-2-3 To what extent have the following been a part of the budgetary control?

Components	Never	Rarely	Sometimes	Often	Always
Salaries & awards					
Operational expenditure					
Services expenditure					
Income					

B-2-4 Does your People's Committee of municipality use computers to prepare the budgetary control?

☐ Yes (please indicate the extent of the usage) ☐ NO

Never	Rarely	Sometimes	Often	Always

B-2-5 What is source for providing of budgetary control information?

Source of information	
Monthly reporting by financial departments	
From records of the spending departments	

B-2-6-Does your people's committee of municipality use the following information for the purpose of comparison?
If yes, please indicate the extent: 1= never, 2= rarely, 3= sometimes, 4= often, 5= always.

Information	1	2	3	4	5
Actual revenue					
Actual expenditure					
Time apportioned amount					
Surplus / deficit					

Section C:
This section is about performance measurement.

C-2-1 Are the non-financial measures included in the annual budget?

Never	Rarely	Sometimes	Often	Always

C-2-2 What is the extent of inclusion of performance indicators in planning and control documents?

Very Little	Little	Average	Above average	High	Very high

C-2-3 Does your people's committee of municipality use the following performance measurement techniques?
If yes, please choose the appropriate level of importance of the following techniques to your people's committee: 1= unimportant, 2= below average importance, 3= Average importance, 4= above average importance, 5= extremely importance.

Techniques	1	2	3	4	5
Budget variance analysis					
Meeting the budget					
Comparison with another people's committee					
Others (please specify)................					

C-2-4 Which of the following are responsible for performance evaluation of your people's committee of municipality?

The responsibility of performance evaluation	
Performance evaluation by external organisations belonging to the state	
Performance evaluation by both internal departments and external organisations belonging to the state	

Part three: The Factors that affect the Management accounting techniques in Libyan people's committees of municipalities

A-3-1-This part suggests the factors that might affect accounting in general and, management accounting in Libyan people's committees of municipalities in particular.

The Factors	No	yes	How important are the following factors in influencing the applying of management accounting techniques?				
			Not important	Below average importance	Average importance	Above average importance	Extremely important
Top management support.							
Management accounting training programmes.							
Motivations systems							
Adequate financial resources for accounting development.							
Using computer system for management accounting purposes.							
Professional accounting bodies in Libya.							
Accounting research in Libya.							
Accounting education in Libya.							
Co-operation between universities and LPCMs.							
Economic changes.							
Policy of Government							
Others (please specify)							

Part four: General Questions

4-1 What is the importance level of management accounting information in your people's committee of municipality?

Unimportant	below average importance	Average importance	Above average importance	extremely important

4-2 Do you think that the applications of management accounting techniques in your people's committee of municipality need to be improved?

☐ Yes ☐ No

4-3 Is there any relationship between the budget and liquidity?

☐ Yes ☐ No

4-4 Has the budget preparing and budgetary control system changed since the suspension of sanctions imposed on Libya?

☐ Yes ☐ No

4-5 please state the changes in the management accounting system in your people's committee after the suspension of sanctions imposed on Libya?

....

....

4-6What are the strengths and weaknesses of management accounting system in your people's committee?

....

....

4-7Would you like a copy of the results of this study?

☐ Yes ☐ No

4-8 Do you have any query into questionnaire content?

☐ Yes (please specify) ☐ No

Thanks for your co-operation

Appendix B

Semi-structured interviews

Semi-structured interviews questions

Introduction.

Thank for time.

Importance of study.

Assure interviewee of perfect confidentiality.

Demographic Information:

- Name of governmental body:

- Name of interviewee:

- Qualification:

- Could you please tell me a little about yourself in terms of your experience?

Section One: the budget Preparation in LPCMs

- What are stages for the budget preparation of LPCMs?

- Who is responsible of the budget preparation in PCMs?

- If LPCMs are prepared their annual budget by committees. Which department has membership in these committees and way?

-What is the important budget in use of PCMs?

- What are the sections included in the annual budget and the purpose of those sections?

- Budget preparation centralised / decentralised?

- are you still using the cash basis to prepare the budget?

- Are there any rules and considerations must be taken into account when preparing the annual budget proposals?

- What is starting point used to prepare the annual budget and why?

- What is the method used to prepare the annual budget and why?

- What is the key purpose of budget preparation?

Section Two: budget implementation in LPCMs

-What are the stages of annual budget implementing?

- Who are primarily responsible for control all the financial procedures of budget implementation?

- What action taken about the spending?

Section Three: budgetary control information

- What is the aim of budgetary control system?

- Who is primarily responsible for budgetary control information of LPCMs?

- What is period for providing reports of budgetary control information?

-What are the contents in budgetary control reports?

- What is the level of your satisfaction with the following aspects?

  * Frequency of reports about actual revenue and expenditures.

  * Accuracy of the information provided.

  * Detailing of information provided.

  * Allocation technique of payments.

- How do you obtain information about actual revenue and expenditure? (Fax, Telephone, hard copy…)

-Who is responsible for preparing the budgetary control information? Why?

- Is LPCMs using computers for preparing the budgetary control information?

- How frequently is this matter?

-What is the source of budgetary control information?

-Are there any efforts to improve the application of management accounting techniques?

-What is the way for determining the variance of revenue? Why?

Section Four: controlling and performance evaluation

- What are the main divisions of control system of LPCMs?

- Who is primarily responsible for LPCMs performance evaluation?

-Do non-financial output measures include in annual budget?

-Is accounting responsibility applied in LPCMs?

-What is the main reason of performance evaluation of LPCMs?

- Are there any performance measurement indicators of public services in LPCMs?

- The level of your satisfaction about the following:

* Frequency of reports about actual income.

----

* Accuracy of the information provided.

----

* Detailing of information provided.

----

* Period of time taken to provide reports.

-What are the measurement performance techniques using of LPCMs?

-What are the weaknesses of performance evaluation system in your LPCMs?

-Do you have any additional information about LPCMs performance?

Section Five: Final accounts

-What is the main reason of final accounts?

-Who is the responsible for preparing the final accounts?

-What are the procedures of final accounts preparation of LPCMs?

Section six: development plans

- What is starting point used to prepare development plans and why?

- Who is primarily responsible for preparing the development plans?

- What is the key purpose for preparing development plans?

- Who is responsible for implementing the development plans? What are the actions taken about the spending of development plans?

Section seven: The Factors that affected the Management accounting techniques in governmental bodies and LPCMs

- How important are the following factors in influencing the applying of management accounting techniques?

- Top management support.

- Adequate financial resources for accounting development, and using computer system for management accounting purposes.

- Management accounting training programmes, and motivations systems.

- Accounting education in Libya.

- Professional accounting bodies in Libya.

-Business environment.

- Policy of Government, and Economic changes.

-What is the importance level of management accounting system in governmental bodies and LPCMs?

Appendix C

Ethical Approval from Liverpool John Moores University's [LJMU] Research Ethic Committee

Ref.: 07.103

Abdul-Aziz Rajab M Tahar
Flat 4
2 princes Avenue
Liverpool
L8 2TA

Tuesday 29th January 2008

liverpool JMU

Dear Abdul-Aziz,

With reference to your application for Ethical approval titled:

The effectiveness of management accounting techniques within the Libyan People's Committees-Empirical evidence

Thank you for correspondence responding to the proviso and I am happy to confirm your application is fully approved.

The Ethics Committee approval is given on the understanding that:

(i) any adverse reactions/events which take place during the course of the project will be reported to the Committee immediately;
(ii) any unforeseen ethical issues arising during the course of the project will be reported to the Committee immediately;
(iii) any change in the protocol will be reported to the Committee immediately.

Please note that ethical approval is given for a period of five years from the date granted and therefore the expiry date for this project will be **July 2012**. An application for extension of approval must be submitted if the project continues after this date.

I am enclosing form EC5 and would be grateful if you could spare the time to complete the questionnaire and return it to me.

Yours sincerely

Jo McWatt
Graduate Research Administrator
Tel: 0151 231 3119
E-mail: j.m.mcwatt@ljmu.ac.uk

CC: Supervisor

Appendix D

Text cut of Questionnaire Data Analysis

Table 1: The job title of the respondents

Job Title	Frequency	Percent
Financial Managers	41	34.8
Financial controllers	50	42.3
Managers of services and projects	27	22.9
Total	118	100

Table 2: The highest academic qualifications of the respondents

Qualification	Frequency	Percent
PhD degree	0	0
Masters degree	8	6.8
Higher diploma	10	8.5
Bachelor degree	73	61.8
Diploma/ Secondary qualification	27	22.9
Other	0	0
Total	118	100

Table 3: The field study of the respondents

Field of study	Frequency	percent
Accounting	65	55
Business administration	19	16.1
Economics	4	3.4
Finance	14	11.9
Other	16	13.6
Total	118	100

Table 6-5: Respondents' age

Age	Frequency	Percent
Under 25years	0	0
25-35years	20	17
36-45years	44	37.3
46-50years	30	25.4
51-55years	19	16.1
Over 55years	5	4.2
Total	118	100

Table 8: name of LPCMs

Name of LPCMs	Frequency
Ajdabiya	3
Al Butnan	2
Al Hizam al Akhdar	4
Al Jabal al Akhdar	4
Al Jifarah	4
Al Jufrah	4
Al Kufrah	3
Al Marj	4
Al Marqab	4
Al Qatrun	3
Al Qubbah	3
Al Wahah	4
An Nuqat al Khams	3
Ash Shati'	4
Az Zawiyah	4
Bani Walid	4
Benghazi	2
Darnah	4
Ghadamis	3
Gharyan	4
Ghat	2
Jaghbub	3
Misratah	4
Mizdah	4
Murzuq	2
Nalut	4
Sabha	3
Sabratah Surman	4
Surt	4
Tajura' wa an Nawahi al Arba'	4
Tripoli	4
Tarhunah-Masallatah	4
Wadi al Hayat	3
Yafran-Jadu	3
Total	118

Table 9: number of employees

Employee number	Frequency	Percent
Less than 100employees	0	0.0
100-150employees	10	8.5
151-200employees	27	22.9
201-250employees	14	11.9
251-500employees	43	36.4
501-1000employees	24	20.3
Above1000employees	0	0.0
Total	118	100

Table 10: the number of employees working in the financial department, according to their qualifications and some statistical measures

Qualifications of financial staff	Mean	Median	Std. deviation	Number of financial staff	Percent
Without qualifications	2.16	2	1.76	256	4.2
With a business administration degree	16.84	16	6.93	1988	32.4
With an economics degree	5.15	3	4.28	608	10
With an accounting degree	11.87	9	8.25	1401	23
With a commercial intermediate diploma	15.66	15	8.91	1848	30
Others	0.25	0	2.31	30	0.40
Total				6131	100

Table 11: professional accounting qualifications in Libya

Professional Qualifications	Sum	Percent
Libyan Certified Accountant (LCA)	1000	79.6
Arab Certified Accountant (ACA)	256	20.4
British Chartered Certified Accountant (ACCA)	0	0
American Certified Public Accountant (CPA)	0	0
British Chartered Management Accountant (CIMA)	0	0
American Certified Management Accountant (CMA)	0	0
Total	1256	100

Table 13: The body responsible for the budget preparation

Responsible	Yes		No	
	Frequency	Percent	Frequency	Percent
Budget committee	117	99.2	1	0.8
Top management	1	0.8	117	99.2

Appendix E
Reliability Analysis

Reliability

****** Method 1 (space saver) will be used for this analysis ******

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R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H
A)

Reliability Coefficients

N of Cases =   26.0   N of Items = 45

Alpha =   .8366

Appendix F
The work experience of researcher within LPCMs

لا ديمقراطية
بدون مؤتمرات شعبية

واللجان في كل مكان

الجماهيرية العربية الليبية الشعبية الاشتراكية العظمى
اللجنة الشعبية لشعبية غريان

التاريخ: / /
الموافق: 11 / 5 / 1374 اللجنة الشعبية للمالية

الرقم الاشاري : 3

إلى من يهمه الأمر

بعد التحية

تفيدكم ،،، اللجنة الشعبية للمالية بشعبية الجبل الغربي بأن الأخ / عبد العزيز رجب الطهار هو أحد موظفيها وقد كلف بمهام مراقب مالي من تاريخ 26-4-1430 حتى تاريخ أفاده للدراسة بالخارج.

أعطيت هذه الإفادة بناءا على طلبه للاستعمال الرسمي

والسلام عليكم ورحمة الله وبركاته

مدير مكتب الميزانية والحسابات

صورة إلى:
الملف الدوري العام.
••••••••••••••••••••••••••••

1374-05-11